Author Index

Volume 84, January 8-June 25, 1999

Aas JK, 929 Adnot S. 329 Agarwal R, 220 Aggarwal R, 424 Aikawa R, 458 Akbarali Y, 1177 Akhter SA, 43 Akishita M, 876 Albayya F, 1310 Alcoléa S, 1365 Alexandersen P, 813 Ali MS, 1332 Allison DC, 1252 Al-Seikhan BA, 424 Alvarado JL, 1144 Anderson ME, 146, 906 Anderson RH, 897 Andreoli AM, 1007 Anversa P, 752, 1007 Arendshorst WJ, 186 Ares MPS, 1085 Armstead VE, 93 Arrell DK 9 Arstall MA, 257 Asada Y, 1446 Asai K, 735 Ashraf M. 1156 Assadnia S, 1252 Atsuchi N, 1446 Ault K, 1416 Avdonin P, 43 Aw TY, 516

Bache RJ, 401 Backx PH, 763, 1302 Baffa JM, 424 Balafonova Z. 587 Balke CW, 424 Banerjee A, 867 Banerjee S, 587, 1095 Banfi C. 1085 Barton HA, 867 Battaglia E, 785 Battinelli EM, 1416 Baumgarten CM, 157 Beck LH, 298 Becker BF, 392 Bennett MR, 820 Benson CJ, 921 Berk BC, 1361 Berliner JA, 345 Bernstein KE, 1332 Bidouard JP, 371 Bierl C, 210 Billiar TR. 253 Bishop SP, 34 Bishopric NH, 21 Bivalacqua TJ, 1422 Bizios R, 315 Biercke RJ, 323 Blanchard E, 475 Bobik A, 1253 Boekstegers P, 392 Bolli R, 587, 1095 Bolotina VM, 201, 210 Bombeck CA, 253 Boni C, 329 Borg TK, 729 Bortolon R, 1292

Bouchard RA, 1302 Boyden PA, 1459 Brack A, 1050 Braden GA, 1268 Branch RA, 229 Brasier AR, 695 Brennan M-L, 345 Briand J-P, 1365 Brink PR, 797 Brizzi MF, 785 Brown C, 655 Brown JH, 1186 Brown NA, 897 Bryant SR, 323, 1212 Burnett JC, 1137 Byrjalsen I, 813

Calara F, 1085 Cambarrat C, 371 Campbell WB, 484 Camussi G, 785 Cannell MB, 266 Cao J-M, 1318 Cardoso MC, 240 Carmeliet P, 883 Carthy CM, 704 Centner T. 1339 Cepinskas G, 103 Cerilli GJ, 1252 Champion HC, 1422 Chan OL-W, 1258 Chao YJ, 804 Chauvin J-P, 1365 Chaytor AT, 53 Chen J, 999 Chen P-S, 1318 Chen Z, 193 Cheng H, 43 Cheng JJ, 804 Cheng Z-J, 831 Chevalier P, 290 Christ GJ, 797 Christiansen C, 813 Clausmeyer S, 337 Clemo HF, 157 Cohen RA, 201, 210 Coleman KR, 1268 Collins T. 1258 Corretti M, 424 Coumel P, 290 Couper LL, 1212 Courtemanche M, 1032 Cowan KN, 1223 Crampton M, 401

Dallapiccola B, 247 D'Amore PA, 298, 1433 Davenport AP, 891 Daviet L, 876 Dawn B, 587 de Martin R, 668 de Tombe PP, 745 Del Sorbo L, 785 Delbridge GJ, 1258 Delescluse I, 371 Delgado MC, 688 Delmar M, 1144 Demay L, 290

Cross H, 1469

Demer LL, 250 Denjoy I, 290 Dentelli P, 785 Deschepper CF, 1453 Dessy C, 1380 Diaz RJ. 763 Dichtl W, 1085 Dinarello CA, 867 Ding B, 729 Dipla K, 435 Doenst T, 467 Dollery CM, 498 Donger C, 290 Draude G, 668 D'Souza FM, 1422 Dube A, 1177 Dubey RK, 229 Dudman NPB, 409 Duplàa C, 1433 Dzau VJ, 21, 876, 1059 Dzeja PP, 1137, 1292

Eckert SP, 921 Eddahibi S, 329 Edelman ER, 378, 384 Edwards JG, 999 Eells JT, 846 Egan J, 1020 Egert S. 1407 Eguchi H, 525 Ek-Vitorin JF, 1144 Elices MJ, 345 Erichsen DA, 323 Eriksson P. 1085 Erl W, 668 Eschenhagen T, 43 Evans CC, 745 Evans T, 647 Evans WH, 53

Fabre V, 329 Fan J. 451 Farrell MJ, 127 Feng J. 551 Feron O, 1380 Fieno DS, 913 Finkel T. 1471 Fleischmann BK, 136 Ford MK, 763 Frank SJ, 1332 Freedman JE, 1416 Freeman BA, 1203 Friis UG, 929 Fryer RM, 846, 973 Fu W, 409 Fujita T, 445 Fukazawa R. 257 Fukuda K, 1127 Fukuoka T, 64 Furukawa Y, 306

Gacy AM, 1292 Garbarino G, 785 Garfinkel A, 1318 Gaspo R, 776 Gaudet F, 240 Gelband CH, 352 Geng Y-J, 34 Gericke M, 210 Gerritsen ME, 315 Geske R, 84 Ghaleh B, 999 Ghosh S. 1237 Giachelli CM, 166 Gibbons GH, 113 Giles WR, 1245 Gillespie DG, 229 Gilmour RF Jr. 955 Goedecke A. 392 Goncalves I, 1085 Gong Q, 989 Goronzy JJ, 1050 Goto A. 611 Gotwals PJ, 1212 Granger DN, 516, 1353 Granzier H, 1339 Gregg RG, 1 Griffith TM, 53 Grimm D, 365 Gros DB, 1365 Gross GJ, 846, 973, 1396 Guia A, 1032 Guicheney P, 290 Gunning WT III, 1252 Guo XW, 409

Haarbo J, 813 Habazettl H, 392 Haber E, 883 Hainque B, 290 Hall JL, 113 Halloran PF, 729 Hamon M, 329 Hamsten A, 1085 Han H, 1095 Han X, 1380 Han Y, 695 Hansson GK, 668 Harada A, 306 Harada K. 179 Harada N, 1285 Haramaki N, 525 Harder DR, 484 Harken AH, 867 Hashimoto K, 1401 Hassid A. 655 Hawks K, 1332 Hayakawa H, 611 Hayashida W, 876 Hayward R, 93 He G, 505 Heistad DD, 1422 Helmes M, 1339 Henkel AS, 1 Hescheler J, 136 Hetzer R, 713 Hintze TH, 840, 1361 Hirata Y, 611 Hirschi KK, 298 Hittinger L, 999 Hiwada K, 64 Hixon RL, 127 Hoch B. 713 Hoffman MP, 688 Holtz J, 678 Homey CJ, 34 Hong C, 735 Hoppe UC, 964

Horiuchi M, 876, 1059 Horowitz B, 352 Houser SR, 435 Hoying JB, 360 Hsieh HJ, 804 Hsu AK, 846 Huang J, 945 Huang PL, 1416 Huang XP, 1 Huo Y, 1237 Hupf H, 365 Hutcheson IR, 53 Hyman AL, 1422

Ideker RE, 945 Ikeda H, 525 Imahashi K, 1401 Imaizumi T, 525 Inagami T, 64 Ing DJ, 21 Insel PA, 1110 Ishikawa Y, 34, 543 Ives HE, 678 Iwasaka T, 1073 Iwase M, 999 Izumi Y, 605

Jackson EK, 229 Jaconi M, 1292 Jafri S, 571 January CT, 989 Jarry-Guichard T, 1365 Jaspard B, 1433 Jeevanandam V, 435 Jensen BL, 929 Jeter JR, 1422 Ji GJ, 136 Jing Q, 831 Johns DC, 964 Johnson AC, 1258 Jones B, 401 Jones LR, 424 Jones PL, 1223 Judd RM, 913 Jun SS, 193 Jung U, 1237

Kääb S, 562 Kadambi VJ, 360 Kadowaki T, 458, 1194 Kadowitz PJ, 1422 Kagan VE, 229 Kaiser M, 1050 Kajstura J, 752, 1007 Kakoki M, 611 Kaley G, 840 Kamikubo Y-i, 1446 Kaminski PM, 220 Kaneda Y, 1059 Kanmatsuse K. 605 Kaplan DD, 1186 Karagueuzian HS, 1318 Karczewski P, 713 Kass DA, 562 Kato T, 1127 Kattash M, 84 Kawano R, 1446 Keller RS, 745 Kellermayer M, 1339 Kelly RA, 257, 392, 1380 Kenyon JL, 352 Khachigian LM, 1258 Kim RJ, 913 Kim S-J. 999 Kim Y-H, 1318

Kim Y-M, 253 Kirby ML, 127 Kita T. 1113 Kitami Y, 64 Kleinman HK, 688 Kligman M, 1252 Knowles C, 1416 Kobayashi YM, 424 Koch WJ, 43 Kodama H, 1127 Kokura S, 516 Koller ML, 955 Komuro I, 179, 458 Koren G, 937 Kornfeld M, 186 Koteliansky VE, 1212 Kovanen PT, 74 Kowal RC, 722, 1166 Kranias EG, 360 Krause E-G. 713 Kubes P, 1245 Kudej RK, 999 Kudoh S, 458 Kuo L, 276 Kuo MD, 84 Kupatt C, 392 Kupershmidt S, 146 Kuratomi Y, 688 Kurtz A, 186 Kusuoka H, 1401 Kvietys PR, 103

Labeit S, 1339 Lakatta EG, 43, 1020 Lamers WH, 897, 1365 Lawaetz H, 813 Leatherbury L, 127 Leblanc N, 1032 Lee KJ, 1 Lee M-E, 883 Lee-Kirsch MA, 240 Lefer AM, 93 Lefer DJ, 1353 Lefkowitz RJ, 43 Lehtonen JYA, 876 Leinwand LA, 1361 Leri A, 752, 1007 LeWinter M, 475 Ley K, 1237 Li B, 1007 Li DY, 1043 Li HY, 1388 Li J. 84 Li J-J, 1095 Li RCX, 587, 1095 Li X, 1277 Liang BT, 1396 Libby P, 1361 Libermann TA, 1177 Lindner V, 323, 1212 Lindpaintner K, 240 Linke WA, 1339 Lisi RD, 247 Liu J-L, 417 Liu PP, 1302 Liu Y, 752 Liu YE, 498 Liu Z, 704 Loke KE, 840 Lorell BH, 729 Loscalzo J, 1416 Losito VA, 763 Luo Z, 647, 704

Lush CW, 103

Lusis AJ, 345

Ma Y-H. 678 Mabrouk ME, 505 Macdonald K, 820 Mack CP, 852 Magnuson MA, 146 Majumdar M, 1186 Makielski JC, 989 Malendowicz SL, 647 Malhotra A, 752, 1007 Malinda KM, 688 Maltsev VA, 136 Manka DR, 1237 Mano T. 647 Mao GD, 763 Marbán E, 153, 562, 571, 964, 1361 Marchionni MA, 1380 Margulies KB, 435 Marics I, 1365 Martres MP, 329 Maruyama K, 1073 Masaki H, 1073 Masciotra S, 1453 Mason HS, 352 Mastrojanni M. 1144 Matsubara H, 1073 Matsumori A, 306 Matsushima K, 306 Matsuzaki J, 1127 Mattiello JA, 435 Maughan D, 475 McCleskey EW, 921 McConnell PI, 840 McDonough JL, 9 McEwan JR, 498 McKee MD, 166 McKinnon D, 620 McKinsey TA, 735 McManus BM, 704 Medow MS, 315 Meggs LG, 752 Meguro T. 735 Mehta JL, 1043 Melchert P, 401 Melnyk P, 776 Meng X, 867 Methot D, 1067 Metzger JM, 1310 Meyer R, 713 Miano JM, 1166 Michelangeli F, 536 Michele DE, 1310 Miller SA, 867 Minchenko AG, 93 Miura M. 1459 Mohazzab-H KM, 220 Molkentin JD, 623 Montrucchio G, 785 Moore JM, 352 Moorman AFM, 1365 Morawietz H, 678 Moreau C, 1433 Mori Y, 1073 Moriguchi Y, 1073 Morishita R, 1059 Moss RL, 862 Murakami H. 1285 Murakami K, 179 Murasawa S, 1073 Murohara T, 525 Murphy E, 1469 Muthuchamy M, 745

Nagase H, 846 Nagata D, 611 Nagura H. 1285 Nakahara Y, 1446 Nakajima T, 1073 Nakayama T, 605 Nattel S, 551, 776 Nerbonne JM, 551 Nestor AL, 1252 Neyroud N, 290 Nguyen N, 1407 Nilsson J, 1085 Nilsson L, 1085 Nishida T, 1446 Nishimura T, 1401 Niswender KD, 146 Nixon GF, 536 Noiri E, 1194 Nomizu M, 688 Nugent HM, 384

Oda K, 1073 Oehlenschlager J, 745 Oettgen P, 1177 Ogawa S, 1127 Ogihara T, 1059 Ohashi N, 306 Ohkuma T, 1285 Olson EN, 623, 722, 735, 1166 Omata M, 611 Ono K. 306 O'Rourke B, 562, 571, 964 Ortiz LA, 1422 Ostrom RS, 1110 Oudit GY, 1302 Owens GK, 852 Ozawa Y, 605

Pace MC, 193 Palmiter KA, 745 Pan J, 1127 Pan X, 655 Patel A, 883 Paul RJ, 360 Pegoraro L, 785 Pei G, 831 Perez-Terzic C, 1292 Perry MA, 409 Pesce R, 290 Peters J, 337 Philips MI, 1043 Phillips RM, 745 Pi YQ, 1 Picard S, 1453 Pierpont GL, 401 Ping P, 587 Pollman MJ, 113 Ponce ML, 688 Pond A, 551 Poon BY, 1245 Powell S, 688 Powers PA, 1 Prendergast FG, 1292 Price RL, 729 Pringle T, 1252 Puceat M. 1292

Qian Q, 276 Qin Y-W, 831 Qiu Y, 587, 1095 Qu Z, 1318

Rabinovitch M, 1223 Radi R, 1203 Raffestin B, 329 Rafty LA, 1258 Ramos CL, 1237 Ranjan R, 153 Rapp JP 1252 Redfield MM, 1137 Reed GL, 883 Rege A, 323 Rehemudula D. 605 Rehwald WG, 913 Reudelhuber TL, 1067 Reznikov LL, 867 Riccio ML, 955 Rice J. 571 Richard P, 290 Richardson G, 1203 Richardson JA, 1166 Riegger GAJ, 365 Rittner HL, 1050 Roden DM, 146, 906 Rogers C. 378, 384 Rogers JM. 945 Rohovsky SA, 298 Rottman JN, 276 Ruan X, 186 Runge MS, 695 Rusnak F. 722 Russell FD, 891 Rybin VO, 980

Sabe H, 1194 Saito M, 1127 Sakisaka S, 525 Sandner P, 186 Sane DC, 1268 Sang QA, 498 Sano M, 1127 Santiago FS, 1258 Sarembock IJ, 1237 Sasano H, 1285 Sasavama S, 306 Sato M, 605 Sato TN, 1177 Sauter R, 1416 Sawamura T, 1043 Sawyer DB, 257 Saxena R. 84 Sayeski PP, 1332 Scalia R, 93 Scambler P, 127 Schiaffino S, 247 Schiffrin EL, 505 Schmidt AM, 489 Schunkert H. 365 Schwaiger M, 1407 Schwartz EA, 315 Schwartz K, 290, 1361 Schwartz SM, 1234 Seasholtz TM, 1186 Seidman C, 475 Seidman JG, 475 Seko Y, 1194 Selzman CH, 867 Setoguchi M, 1007 Shames BD, 867 Shaul PW, 193 Shenaq SM, 84

Shesely EG, 840

Shi C, 883

Shi H, 551 Shi YE. 498 Shibasaki Y, 1073 Shih PT, 345 Shioi T, 306 Shkolnikova M. 290 Shorofsky SR, 424 Sibinga NES, 883 Sikkink RA, 722 Silversides DW, 1067 Simard JM, 1277 Skøtt O, 929 Smith CJ, 840 Smith JD, 1212 Smith SR, 298 Smith WM, 945 Soeller C, 266 Solaro RJ, 122, 745 Sollott SJ, 1020 Soma M, 605 Squire JC, 378 Stackpole CJ, 840 Stadt H, 127 Stambler BS 157 Steenbergen C, 1469 Steinberg SF, 980 Steitz S, 166 Stergiopoulos K, 1144 Stern D, 489 Strahl D, 345 Strauss HC, 1361 Strum JM, 424 Stürzebecher R, 337 Suarez E, 1203 Sugava T. 179 Sugden PH, 633 Sukhatme VP, 678 Sumners C, 352 Sutliff RL, 360 Suzuki E, 611

Taegtmeyer H, 467 Taffet SM, 1144 Takagi G, 735 Takagi Y, 1285 Takahashi A, 543 Takahashi N, 1194 Takahashi T. 1127 Takahashi Y. 605 Takano H, 587, 1095 Takano K. 445 Takeshita A, 1446 Tamura K, 876 Tanaka Y, 1073 Tang X-L, 587, 1095 Taniguchi T, 543 Tarpey MM, 1203 Tasker PN, 536 Temple SE, 409 ter Keurs HEDJ, 1459 Territo MC, 345 Terzic A, 1137, 1292 Théveniau-Ruissy M, 1365 Thollon C, 371 Thompson CI, 840

Szweda LI, 1050

Thung SN, 84 Tintut Y, 250 Tobe K, 1194 Tomaselli GF, 153, 562 Tomita N, 1059 Tomita S. 1059 Touvz RM, 505 Toyoda K, 1422 Traverse JH, 401 Trepakova ES, 201 Trombitás K, 1339 Tseng DY, 378 Tsushima RG, 1302 Tsutsumi Y, 1073 Tunin R, 562 Tuzman JM, 840 Tyurin VA, 229 Tyurina YY, 229 Tzouanacou E, 1365

Ueno H, 1446 Uwabo J, 605

Valverde P, 937 Van Eyk JE, 9 Vanhoutte PM, 371 Vary CPH, 1212 Vatner DE, 34, 999 Vatner SF, 34, 735, 999, 1361 Victor RG, 722 Vignier N, 290 Vilaine JP, 371 Vila-Petroff MG, 1020 Villeneuve N, 371 Vikevicius KT, 1137 Vives F, 678 Vora DK, 345

Wada T, 166 Wagner TE, 34 Wahr PA, 1310 Walker JW, 1 Wallis KT, 127 Walsh K, 647 Walsh KB, 451 Walsh RA, 741 Wan X, 1032 Wang DL, 804 Wang H, 883 Wang M, 498 Wang X, 752, 1007 Wang Y, 74, 1156 Wang Z, 551, 776 Ward CA, 1245 Warth JD, 352 Waugh JM, 84 Wautier J-L, 489 Webb S, 897 Webb TH, 1252 Weber C, 668 Weber KSC, 668 Webster KA, 21 Weinberg EO, 729 Weisbrod RM, 210 Weiss JN, 1318 Werman A, 867

Wessels A, 146 Westfall MV, 1310 Weyand CM, 1050 White CR, 1203 Wickenden AD, 1302 Wieczorek DF, 745 Wier WG, 424 Willingham MC, 1268 Wilson E. 678 Wilson GJ, 763 Wilson JE, 704 Winegrad S, 1117 Winslow RL, 571 Wobus AM, 136 Wolf DA, 392 Wolf RE, 516 Wolfe R, 127 Wolin MS, 220, 840 Wolska BM, 745 Wong TM, 1388 Woo SLC, 84 Wu S. 1388 Wu T-J, 1318 Wu X-H, 505 Wu Y, 906 Wung BS, 804

Xiao R-P, 43 Xin S-M, 831 Xu X, 980 Xuan Y-T, 1095

Yaghoubi M, 210 Yamada T, 1059 Yamada Y, 688 Yamaguchi H, 1401 Yamazaki T, 458 Yan SD, 489 Yang D, 704 Yang T, 146 Yasui H, 1446 Yasukawa H, 525 Yazaki Y, 179, 458, 1194, 1361 Yokoyama M, 543 Yoshikawa T, 516 Yoshioka J, 1401 Younes A, 1020 Yu J, 704 Yu Y-T, 276 Yue L, 776 Yuksel E, 84

Zahler S, 392 Zang J, 21 Zhang D, 883 Zhang J, 587 Zhang L, 1059 Zhang R, 831 Zhang S, 989 Zhang W, 722 Zhang W-B, 831 Zhang YC, 1043 Zhao Y-Y, 1380 Zhou Y-Y, 43 Zhou Z, 989 Zhu M, 352 Zhu W, 458 Zou Y, 458 Zucker IH, 417

Subject Index

Volume 84, January 8-June 25, 1999

A

A23187

Nitric Oxide-Independent Relaxations to Acetylcholine and A23187 Involve Different Routes of Heterocellular Communication: Role of Gap Junctions and Phospholipase A₂, 53

Acetylcholine

Nitric Oxide-Independent Relaxations to Acetylcholine and A23187 Involve Different Routes of Heterocellular Communication: Role of Gap Junctions and Phospholipase A₂, 53

Action potentia

Electrical Restitution and Spatiotemporal Organization During Ventricular Fibrillation, 955

Manipulation of Cellular Excitability by Cell Fusion: Effects of Rapid Introduction of Transient Outward K+ Current on the Guinea Pig Action Potential, 964

Mechanisms of Altered Excitation-Contraction Coupling in Canine Tachycardia-Induced Heart Failure, I: Experimental Studies, 562

Potential Molecular Basis of Different Physiological Properties of the Transient Outward K+ Current in Rabbit and Human Atrial Myocytes, 551

Activation pattern

Incidence, Evolution, and Spatial Distribution of Functional Reentry During Ventricular Fibrillation in Pigs, 945

Actomyosin

Adenylate Kinase-Catalyzed Phosphotransfer in the Myocardium: Increased Contribution in Heart Failure, 1137

Adenovirus

cdc25A Is Necessary but Not Sufficient for Optimal c-myc-Induced Apoptosis and Cell Proliferation of Vascular Smooth Muscle Cells. 820

Local Overexpression of Thrombomodulin for In Vivo Prevention of Arterial Thrombosis in a Rabbit Model, 84

Reversal of GATA-6 Downregulation Promotes Smooth Muscle Differentiation and Inhibits Intimal Hyperplasia in Balloon-Injured Rat Carotid Artery, 647

Thinking Globally, Acting Locally: The Promise of Cardiovascular Gene Therapy, 1471

Adenovirus vector

Adenovirus-Mediated Local Expression of Human Tissue Factor Pathway Inhibitor Eliminates Shear Stress-Induced Recurrent Thrombosis in the Injured Carotid Artery of the Rabbit, 1446

Adenylate kinase

Adenylate Kinase-Catalyzed Phosphotransfer in the Myocardium: Increased Contribution in Heart Failure, 1137

Adenylyl cyclase

Apoptosis of Cardiac Myocytes in Gsα Transgenic Mice, 34 Establishment of β -Adrenergic Modulation of L-Type Ca²⁺ Current in the Early Stages of Cardiomyocyte Development, 136

Adhesion

Identification of Endothelial Cell Binding Sites on the Laminin γl Chain, 688

Molecular Mechanisms of Neutrophil-Endothelial Cell Adhesion Induced by Redox Imbalance, 516

Adrenal gland

An Alternative Transcript of the Rat Renin Gene Can Result in a Truncated Prorenin That Is Transported Into Adrenal Mitochondria, 337

β-Adrenergic receptor

Apoptosis of Cardiac Myocytes in Gsα Transgenic Mice, 34 Coupling of β₂-Adrenoceptor to G_i Proteins and Its Physiological Relevance in Murine Cardiac Myocytes, 43

$\alpha_4\beta_1$

Blocking Very Late Antigen-4 Integrin Decreases Leukocyte Entry and Fatty Streak Formation in Mice Fed an Atherogenic Diet, 345

Vitaxin, a Humanized Monoclonal Antibody to the Vitronectin Receptor (α, β_3) , Reduces Neointimal Hyperplasia and Total Vessel Area After Balloon Injury in Hypercholesterolemic Rabbits, 1268

Alternative splicing

Distinct Renin Isoforms Generated by Tissue-Specific Transcription Initiation and Alternative Splicing, 240

Amyloid

Activation of Receptor for Advanced Glycation End Products: A Mechanism for Chronic Vascular Dysfunction in Diabetic Vasculopathy and Atherosclerosis, 489

Anatomical obstacles

Spatiotemporal Heterogeneity in the Induction of Ventricular Fibrillation by Rapid Pacing: Importance of Cardiac Restitution Properties. 1318

Androgen

Natural Androgens Inhibit Male Atherosclerosis: A Study in Castrated, Cholesterol-Fed Rabbits, 813

Angiogenesis

Identification of Endothelial Cell Binding Sites on the Laminin γl Chain, 688

Role of the Ets Transcription Factors in the Regulation of the Vascular-Specific Tie2 Gene, 1177

Angioplasty

Anti-Monocyte Chemoattractant Protein-1/Monocyte Chemotactic and Activating Factor Antibody Inhibits Neointimal Hyperplasia in Injured Rat Carotid Arteries, 306

Tranilast Inhibits Vascular Smooth Muscle Cell Growth and Intimal Hyperplasia by Induction of p21***artifcip1**ids1** and p53, 543

Vascular Injury Causes Neointimal Formation in Angiotensin II Type 1a Receptor Knockout Mice, 179

Angiotensin

In Vivo Enzymatic Assay Reveals Catalytic Activity of the Human Renin Precursor in Tissues, 1067

Regulation of Sympathetic Nerve Activity in Heart Failure: A Role for Nitric Oxide and Angiotensin II, 417

Stimulation of Different Subtypes of Angiotensin II Receptors, AT₁ and AT₂ Receptors, Regulates STAT Activation by Negative Crosstalk, 876

Vascular Injury Causes Neointimal Formation in Angiotensin II Type la Receptor Knockout Mice, 179

Angiotensin II

Angiotensin II Induces Interleukin-6 Transcription in Vascular Smooth Muscle Cells Through Pleiotropic Activation of Nuclear Factor-κΒ Transcription Factors, 695

Angiotensin II Type 1 Receptor-Mediated Inhibition of K⁺ Channel Subunit Kv2.2 in Brain Stem and Hypothalamic Neurons, 352

The Angiotensin II—Dependent Association of Jak2 and c-Src Requires the N-Terminus of Jak2 and the SH2 Domain of c-Src, 1332

Angiotensin II-Induced Transactivation of Epidermal Growth Factor Receptor Regulates Fibronectin and Transforming Growth Factor-β Synthesis via Transcriptional and Posttranscriptional Mechanisms, 1073

LOX-1, a Possible Clue to the Missing Link Between Hypertension and Atherogenesis, 1113

Mechanical Stretch Activates the JAK/STAT Pathway in Rat Cardiomyocytes, 1127

Overexpression of Insulin-Like Growth Factor-1 Attenuates the Myocyte Renin-Angiotensin System in Transgenic Mice, 752

Upregulation of Endothelial Receptor for Oxidized Low-Density Lipoprotein (LOX-1) in Cultured Human Coronary Artery Endothelial Cells by Angiotensin II Type 1 Receptor Activation, 1043

Angiotensin II receptor

Angiotensin II-Induced Transactivation of Epidermal Growth Factor Receptor Regulates Fibronectin and Transforming Growth Factor-B Synthesis via Transcriptional and Posttranscriptional Mechanisms, 1073

Anisotropy

A Novel Mechanism of Anode-Break Stimulation Predicted by Bidomain Modeling, 153

Anoxia

Molecular Mechanisms of Neutrophil-Endothelial Cell Adhesion Induced by Redox Imbalance, 516 Antiarrhythmic drug

Mechanism of Block and Identification of the Verapamil Binding Domain to HERG Potassium Channels, 989

Potential Molecular Basis of Different Physiological Properties of the Transient Outward K⁺ Current in Rabbit and Human Atrial Myocytes, 551

Antioxidant

Daunorubicin-Induced Apoptosis in Rat Cardiac Myocytes Is Inhibited by Dexrazoxane, 257

Estrogen and Tamoxifen Metabolites Protect Smooth Muscle Cell Membrane Phospholipids Against Peroxidation and Inhibit Cell Growth, 229

Aortic banding

Cyclosporine Attenuates Pressure-Overload Hypertrophy in Mice While Enhancing Susceptibility to Decompensation and Heart Failure, 735

Failure of Calcineurin Inhibitors to Prevent Pressure-Overload Left Ventricular Hypertrophy in Rats, 722

Apolipoprotein

Direct Demonstration of P-Selectin— and VCAM-1-Dependent Mononuclear Cell Rolling in Early Atherosclerotic Lesions of Apolipoprotein E-Deficient Mice, 1237

Apoptosis

Apoptosis of Cardiac Myocytes in Gsα Transgenic Mice, 34

cdc25A Is Necessary but Not Sufficient for Optimal c-myc-Induced Apoptosis and Cell Proliferation of Vascular Smooth Muscle Cells, 820

Determinants of Vascular Smooth Muscle Cell Apoptosis After Balloon Angioplasty Injury: Influence of Redox State and Cell Phenotype, 113

Nitric Oxide as a Bifunctional Regulator of Apoptosis, 253

Nuclear Factor-&B Regulates Induction of Apoptosis and Inhibitor of Apoptosis Protein-1 Expression in Vascular Smooth Muscle Cells, 668

Regression of Hypertrophied Rat Pulmonary Arteries in Organ Culture Is Associated With Suppression of Proteolytic Activity, Inhibition of Tenascin-C, and Smooth Muscle Cell Apoptosis, 1223

Aromatase

Localized Expression of Aromatase in Human Vascular Tissues, 1285

Array display

The Definition of Cell Type, 1234

Arrhythmia

Mechanism of Block and Identification of the Verapamil Binding Domain to HERG Potassium Channels, 989

Molecular Mechanisms Underlying Ionic Remodeling in a Dog Model of Atrial Fibrillation, 776

Potential Molecular Basis of Different Physiological Properties of the Transient Outward K⁺ Current in Rabbit and Human Atrial Myocytes, 551

Swelling-Activated Chloride Current Is Persistently Activated in Ventricular Myocytes From Dogs With Tachycardia-Induced Congestive Heart Failure, 157

Arteriosclerosis

Plasminogen Is Not Required for Neointima Formation in a Mouse Model of Vein Graft Stenosis, 883

Artery

TIMP-4 Is Regulated by Vascular Injury in Rats, 498

Aspase

Nitric Oxide as a Bifunctional Regulator of Apoptosis, 253

Association

Structure of the Type B Human Natriuretic Peptide Receptor Gene and Association of a Novel Microsatellite Polymorphism With Essential Hypertension, 605

Atherosclerosis

Activation of p38 Mitogen-Activated Protein Kinase by Oxidized LDL in Vascular Smooth Muscle Cells: Mediation via Pertussis Toxin-Sensitive G Proteins and Association With Oxidized LDL-Induced Cytotoxicity, 831

Blocking Very Late Antigen-4 Integrin Decreases Leukocyte Entry and Fatty Streak Formation in Mice Fed an Atherogenic Diet, 345

Direct Demonstration of P-Selectin- and VCAM-1-Dependent Mononuclear Cell Rolling in Early Atherosclerotic Lesions of Apolipoprotein E-Deficient Mice, 1237 EVEC, a Novel Epidermal Growth Factor-Like Repeat-Containing Protein Upregulated in Embryonic and Diseased Adult Vasculature, 1166

Heparin Proteoglycans Released From Rat Serosal Mast Cells Inhibit Proliferation of Rat Aortic Smooth Muscle Cells in Culture, 74

LOX-1, a Possible Clue to the Missing Link Between Hypertension and Atherogenesis, 1113

Natural Androgens Inhibit Male Atherosclerosis: A Study in Castrated, Cholesterol-Fed Rabbits, 813

Very Low-Density Lipoprotein Activates Nuclear Factor-κB in Endothelial Cells, 1085

ATP

Structural Plasticity of the Cardiac Nuclear Pore Complex in Response to Regulators of Nuclear Import, 1292

ATP-sensitive K+ channel

Sarcolemmal Versus Mitochondrial ATP-Sensitive K⁺ Channels and Myocardial Preconditioning, 973

Atrial natriuretic factor

Cosegregation Analysis in Genetic Crosses Suggests a Protective Role for Atrial Natriuretic Factor Against Ventricular Hypertrophy, 1453

Pressure Overload Induces Severe Hypertrophy in Mice Treated With Cyclosporine, an Inhibitor of Calcineurin, 729

Atrioventricular septal defect

Mechanisms of Deficient Cardiac Septation in the Mouse With Trisomy 16, 897

B

Balloon

Balloon-Artery Interactions During Stent Placement: A Finite Element Analysis Approach to Pressure, Compliance, and Stent Design as Contributors to Vascular Injury, 378

Determinants of Vascular Smooth Muscle Cell Apoptosis After Balloon Angioplasty Injury: Influence of Redox State and Cell Phenotype, 113

Strain Differences in Neointimal Hyperplasia in the Rat, 1252

Vitaxin, a Humanized Monoclonal Antibody to the Vitronectin Receptor (α,β₃), Reduces Neointimal Hyperplasia and Total Vessel Area After Balloon Injury in Hypercholesterolemic Rabbits, 1268

Basic fibroblast growth factor

Vascular Remodeling in Response to Altered Blood Flow Is Mediated by Fibroblast Growth Factor-2, 323

Bcl-x

Determinants of Vascular Smooth Muscle Cell Apoptosis After Balloon Angioplasty Injury: Influence of Redox State and Cell Phenotype, 113 Modulation of Cytokine-Induced Cardiac Myocyte Apoptosis by

Nitric Oxide, Bak, and Bcl-x, 21

Bifurcation

Spatiotemporal Heterogeneity in the Induction of Ventricular Fibrillation by Rapid Pacing; Importance of Cardiac Restitution Properties. 1318

Bioenergetics

Adenylate Kinase-Catalyzed Phosphotransfer in the Myocardium: Increased Contribution in Heart Failure, 1137

Blood flow

Adenovirus-Mediated Local Expression of Human Tissue Factor Pathway Inhibitor Eliminates Shear Stress-Induced Recurrent Thrombosis in the Injured Carotid Artery of the Rabbit, 1446

Regulation of Myocardial Blood Flow by Oxygen Consumption Is Maintained in the Failing Heart During Exercise, 401

Bovine-secreted frizzled-related protein

Identification and Cloning of a Secreted Protein Related to the Cysteine-Rich Domain of Frizzled: Evidence for a Role in Endothelial Cell Growth Control, 1433

Bradykinin

Alteration of Endothelium-Dependent Hyperpolarizations in Porcine Coronary Arteries With Regenerated Endothelium, 371

Brain

Distinct Renin Isoforms Generated by Tissue-Specific Transcription Initiation and Alternative Splicing, 240

Bypass surgery

Plasminogen Is Not Required for Neointima Formation in a Mouse Model of Vein Graft Stenosis, 883 C

C-myc

cdc25A Is Necessary but Not Sufficient for Optimal c-myc-Induced Apoptosis and Cell Proliferation of Vascular Smooth Muscle Cells, 820

C-Src

The Angiotensin II-Dependent Association of Jak2 and c-Src Requires the N-Terminus of Jak2 and the SH2 Domain of c-Src, 1332

Cardioprotection of Preconditioning by Metabolic Inhibition in the Rat Ventricular Myocyte: Involvement of κ-Opioid Receptor, 1388

Cyclosporine Attenuates Pressure-Overload Hypertrophy in Mice While Enhancing Susceptibility to Decompensation and Heart Failure, 735

Effects of Myosin Heavy Chain Isoform Switching on Ca2+-Activated Tension Development in Single Adult Cardiac Myocytes, 1310

Mechanism of Nitric Oxide-Induced Vasodilatation: Refilling of Intracellular Stores by Sarcoplasmic Reticulum Ca2+ ATPase and Inhibition of Store-Operated Ca2+ Influx, 210

Modulation of Iron Uptake in Heart by L-Type Ca2+ Channel Modifiers: Possible Implications in Iron Overload, 1302

Molecular Mechanisms Underlying Ionic Remodeling in a Dog Model of Atrial Fibrillation, 776

Nitric Oxide Inhibits Capacitative Cation Influx in Human Platelets by Promoting Sarcoplasmic/Endoplasmic Reticulum Ca2+-ATPase-Dependent Refilling of Ca2+ Stores, 201

Phospholamban Is Present in Endothelial Cells and Modulates Endothelium-Dependent Relaxation: Evidence From Phospholamban Gene-Ablated Mice, 360

Plasticity in the Dynamics of Myocardial Contraction: Ca2+, Crossbridge Kinetics, or Molecular Cooperation, 862

Reduced Subendocardial Ryanodine Receptors and Consequent Effects on Cardiac Function in Conscious Dogs With Left Ventricular Hypertrophy, 999

Structural Plasticity of the Cardiac Nuclear Pore Complex in Response to Regulators of Nuclear Import, 1292

Ca2+-activated chloride current

Calmodulin Kinase Inhibition Prevents Development of the Arrhythmogenic Transient Inward Current, 906

Ca2+ antagonist

Mechanism of Block and Identification of the Verapamil Binding Domain to HERG Potassium Channels, 989

Ca2+ ATPase

Mechanism of Nitric Oxide-Induced Vasodilatation: Refilling of Intracellular Stores by Sarcoplasmic Reticulum Ca2+ ATPase and Inhibition of Store-Operated Ca2+ Influx, 210

Ca2+ overload

Sodium Regulation During Ischemia Versus Reperfusion and Its Role in Injury, 1469

Role of Protein Kinase C in Mitochondrial KATP Channel-Mediated Protection Against Ca2+ Overload Injury in Rat Myocardium, 1156

Ca2+ preconditioning

Role of Protein Kinase C in Mitochondrial KATP Channel-Mediated Protection Against Ca2+ Overload Injury in Rat Myocardium, 1156

Ca2+ spark

Cellular Mechanisms of Altered Contractility in the Hypertrophied Heart: Big Hearts, Big Sparks, 424

Mechanism of Nitric Oxide-Induced Vasodilatation: Refilling of Intracellular Stores by Sarcoplasmic Reticulum Ca2+ ATPase and Inhibition of Store-Operated Ca2+ Influx, 210

Ca2+ transient

Cellular Mechanisms of Altered Contractility in the Hypertrophied Heart: Big Hearts, Big Sparks, 424

Mechanisms of Altered Excitation-Contraction Coupling in Canine

Tachycardia-Induced Heart Failure, II: Model Studies, 571
The Sarcoplasmic Reticulum and the Na*/Ca²* Exchanger Both Contribute to the Ca2+ Transient of Failing Human Ventricular Myocytes, 435

Ca2+ uptake

Mechanisms of Altered Excitation-Contraction Coupling in Canine Tachycardia-Induced Heart Failure, I: Experimental Studies, 562 Ca2+ wave

Ca2+ Waves During Triggered Propagated Contractions in Intact Trabeculae: Determinants of the Velocity of Propagation, 1459

Ca2+/calmodulin-dependent protein kinase II Identification and Expression of δ-Isoforms of the Multifunctional Ca2+/Calmodulin-Dependent Protein Kinase in Failing and Nonfailing Human Myocardium, 713

[Ca2+];

Mitogen-Activated Protein/Extracellular Signal-Regulated Kinase Inhibition Attenuates Angiotensin II-Mediated Signaling and Contraction in Spontaneously Hypertensive Rat Vascular Smooth Muscle Cells, 505

Caffeine

Waves During Triggered Propagated Contractions in Intact Trabeculae: Determinants of the Velocity of Propagation, 1459 Calcineurin

Cyclosporine Attenuates Pressure-Overload Hypertrophy in Mice While Enhancing Susceptibility to Decompensation and Heart Failure, 735

Failure of Calcineurin Inhibitors to Prevent Pressure-Overload Left Ventricular Hypertrophy in Rats, 722

Pressure Overload Induces Severe Hypertrophy in Mice Treated With Cyclosporine, an Inhibitor of Calcineurin, 729

Prevention of Cardiac Hypertrophy by Calcineurin Inhibition: Hope or Hype? 623

Signaling in Myocardial Hypertrophy: Life After Calcineurin? 633

Calcium movement

Signaling in Myocardial Hypertrophy: Life After Calcineurin? 633 Calmodulin kinase

Calmodulin Kinase Inhibition Prevents Development of the Arrhythmogenic Transient Inward Current, 906

8-CaMKII

Identification and Expression of δ-Isoforms of the Multifunctional Ca2+/Calmodulin-Dependent Protein Kinase in Failing and Nonfailing Human Myocardium, 713

cAMP

Activation of Distinct cAMP-Dependent and cGMP-Dependent Pathways by Nitric Oxide in Cardiac Myocytes, 1020

Direct Demonstration of Exocytosis and Endocytosis in Single Mouse Juxtaglomerular Cells, 929

cAMP-dependent protein kinase A

Establishment of β-Adrenergic Modulation of L-Type Ca²⁺ Current in the Early Stages of Cardiomyocyte Development, 136

Cardiac contractility

Coupling of B2-Adrenoceptor to G1 Proteins and Its Physiological Relevance in Murine Cardiac Myocytes, 43

Cardiac edema

Swelling-Activated Chloride Current Is Persistently Activated in Ventricular Myocytes From Dogs With Tachycardia-Induced Congestive Heart Failure, 157

Cardiac oxygen consumption

Endogenous Endothelial Nitric Oxide Synthase-Derived Nitric Oxide Is a Physiological Regulator of Myocardial Oxygen Consumption, 840

Cardiac sensory neuron

Acid-Evoked Currents in Cardiac Sensory Neurons: A Possible Mediator of Myocardial Ischemic Sensation, 921

Cardiomyocyte

Activated Protein Kinase C Isoforms Target to Cardiomyocyte Caveolae: Stimulation of Local Protein Phosphorylation, 980

Activation of Distinct cAMP-Dependent and cGMP-Dependent Pathways by Nitric Oxide in Cardiac Myocytes, 1020

Chloride Channel Inhibition Blocks the Protection of Ischemic Preconditioning and Hypo-Osmotic Stress in Rabbit Ventricular Myocardium, 763

Neuregulin Signaling in the Heart: Dynamic Targeting of erbB4 to Caveolar Microdomains in Cardiac Myocytes, 1380

Prevention of Cardiac Hypertrophy by Calcineurin Inhibition: Hope or Hype? 623

Vascular Endothelial Growth Factor Induces Activation and Subcellular Translocation of Focal Adhesion Kinase (p125FAK) in Cultured Rat Cardiac Myocytes, 1194

Cardiomyopathy

Altered Crossbridge Kinetics in the aMHC403/+ Mouse Model of Familial Hypertrophic Cardiomyopathy, 475

Apoptosis of Cardiac Myocytes in Gsα Transgenic Mice, 34

Calcineurin Inhibition as Therapy for Cardiac Hypertrophy and Heart Failure: Requiescat in Pace? 741

Identification and Expression of δ -Isoforms of the Multifunctional $Ca^{2+}/Calmodulin$ -Dependent Protein Kinase in Failing and Nonfailing Human Myocardium, 713

Swelling-Activated Chloride Current Is Persistently Activated in Ventricular Myocytes From Dogs With Tachycardia-Induced Congestive Heart Failure, 157

Cardioprotection

Direct Preconditioning of Cardiac Myocytes via Opioid Receptors and $K_{\rm ATP}$ Channels, 1396

Opioid-Induced Second Window of Cardioprotection: Potential Role of Mitochondrial K_{ATP} Channels, 846

Cardiotoxicity

Daunorubicin-Induced Apoptosis in Rat Cardiac Myocytes Is Inhibited by Dexrazoxane, 257

Cardiovascular disease

Estrogen and Tamoxifen Metabolites Protect Smooth Muscle Cell Membrane Phospholipids Against Peroxidation and Inhibit Cell Growth, 229

Cardiovascular research

Eight Years Behind the Masthead, 1361

Carotid artery

Tranilast Inhibits Vascular Smooth Muscle Cell Growth and Intimal Hyperplasia by Induction of p21^{waf1/cip1/sdi1} and p53, 543

Vascular Injury Causes Neointimal Formation in Angiotensin II Type 1a Receptor Knockout Mice, 179

Catecholamine

Apoptosis of Cardiac Myocytes in Gsα Transgenic Mice, 34

Contribution of α-Adrenergic and β-Adrenergic Stimulation to Ischemia-Induced Glucose Transporter (GLUT) 4 and GLUT1 Translocation in the Isolated Perfused Rat Heart, 1407

Cation influx

Nitric Oxide Inhibits Capacitative Cation Influx in Human Platelets by Promoting Sarcoplasmic/Endoplasmic Reticulum Ca²⁺-ATPase– Dependent Refilling of Ca²⁺ Stores, 201

Cationic liposome

Liposomal Delivery of Purified Inhibitory-κBα Inhibits Tumor Necrosis Factor-α-Induced Human Vascular Smooth Muscle Proliferation, 867

Caveolae

Activated Protein Kinase C Isoforms Target to Cardiomyocyte Caveolae: Stimulation of Local Protein Phosphorylation, 980

Caveolar Microdomains of the Sarcolemma: Compartmentation of Signaling Molecules Comes of Age, 1110

Caveolin

Neuregulin Signaling in the Heart: Dynamic Targeting of erbB4 to Caveolar Microdomains in Cardiac Myocytes. 1380

CCAAT-enhancer binding protein

A High Level of CCAAT-Enhancer Binding Protein-δ Expression Is a Major Determinant for Markedly Elevated Differential Gene Expression of the Platelet-Derived Growth Factor-α Receptor in Vascular Smooth Muscle Cells of Genetically Hypertensive Rats. 64

Cell adhesion

Endothelial Injuries of Coronary Arteries Distal to Thrombotic Sites:
Role of Adhesive Interaction Between Endothelial P-Selectin and
Leukocyte Sialyl Lewis^X, 525

Vascular Endothelial Growth Factor Induces Activation and Subcellular Translocation of Focal Adhesion Kinase (p125^{FAK}) in Cultured Rat Cardiac Myocytes, 1194

Cell adhesion molecule

Monocyte Rolling in Early Atherogenesis: Vital Role in Lesion Development, 1353

Cell-cell interaction

Endothelial Cells Modulate the Proliferation of Mural Cell Precursors via Platelet-Derived Growth Factor-BB and Heterotypic Cell Contact, 298

Cell cycle

Molecular Mechanisms of Endothelin-1-Induced Cell-Cycle Progression: Involvement of Extracellular Signal-Regulated Kinase, Protein Kinase C, and Phosphatidylinositol 3-Kinase at Distinct Points, 611

Cell fusion

Manipulation of Cellular Excitability by Cell Fusion: Effects of Rapid Introduction of Transient Outward K* Current on the Guinea Pig Action Potential, 964

Cell lineage

The Definition of Cell Type, 1234

Cell migration

Rho and Rho Kinase Mediate Thrombin-Stimulated Vascular Smooth Muscle Cell DNA Synthesis and Migration, 1186

Cell proliferation

Exposure of Human Vascular Endothelial Cells to Sustained Hydrostatic Pressure Stimulates Proliferation: Involvement of the α_V Integrins, 315

Cell size

Swelling-Activated Chloride Current Is Persistently Activated in Ventricular Myocytes From Dogs With Tachycardia-Induced Congestive Heart Failure, 157

Cell type

The Definition of Cell Type, 1234

cGMP

Activation of Distinct cAMP-Dependent and cGMP-Dependent Pathways by Nitric Oxide in Cardiac Myocytes, 1020

Nitric Oxide and C-Type Atrial Natriuretic Peptide Stimulate Primary Aortic Smooth Muscle Cell Migration via a cGMP-Dependent Mechanism: Relationship to Microfilament Dissociation and Altered Cell Morphology, 655

Nitric Oxide as a Bifunctional Regulator of Apoptosis, 253

Nitric Oxide/cAMP Interactions in the Control of Rat Renal Vascular Resistance, 186

Channels

Direct Preconditioning of Cardiac Myocytes via Opioid Receptors and K_{ATP} Channels, 1396

Modulation of Iron Uptake in Heart by L-Type Ca²⁺ Channel Modifiers: Possible Implications in Iron Overload, 1302

Molecular Mechanisms Underlying Ionic Remodeling in a Dog Model of Atrial Fibrillation, 776

Proadrenomedullin N-Terminal 20 Peptide Hyperpolarizes the Membrane by Activating an Inwardly Rectifying K⁺ Current in Differentiated PC12 Cells, 445

Chao

Spatiotemporal Heterogeneity in the Induction of Ventricular Fibrillation by Rapid Pacing: Importance of Cardiac Restitution Properties, 1318

Chloride channel

Chloride Channel Inhibition Blocks the Protection of Ischemic Preconditioning and Hypo-Osmotic Stress in Rabbit Ventricular Myocardium, 763

Clathrin-coated pit

Caveolar Microdomains of the Sarcolemma: Compartmentation of Signaling Molecules Comes of Age, 1110

Cloning

Identification and Cloning of a Secreted Protein Related to the Cysteine-Rich Domain of Frizzled: Evidence for a Role in Endothelial Cell Growth Control, 1433

Coelenterazine

Chemiluminescent Detection of Oxidants in Vascular Tissue: Lucigenin But Not Coelenterazine Enhances Superoxide Formation, 1203

Collagen

Soluble Transforming Growth Factor-β Type II Receptor Inhibits Negative Remodeling, Fibroblast Transdifferentiation, and Intimal Lesion Formation But Not Endothelial Growth, 1212

Conducting system

Replacement by Homologous Recombination of the minK Gene With lacZ Reveals Restriction of minK Expression to the Mouse Cardiac Conduction System, 146

Connecti

Mechanically Driven Contour-Length Adjustment in Rat Cardiac Titin's Unique N2B Sequence: Titin Is an Adjustable Spring, 1339

Connecting segment-1

Blocking Very Late Antigen-4 Integrin Decreases Leukocyte Entry and Fatty Streak Formation in Mice Fed an Atherogenic Diet, 345

Connexin

Analysis of the Presence and Physiological Relevance of Subconducting States of Connexin43-Derived Gap Junction Channels in Cultured Human Corporal Vascular Smooth Muscle Cells, 797

Hetero-Domain Interactions as a Mechanism for the Regulation of Connexin Channels, 1144

Connexin 40

Multiple Connexins Form Gap Junction Channels in Rat Basilar Artery Smooth Muscle Cells, 1277

Connexin 43

Multiple Connexins Form Gap Junction Channels in Rat Basilar Artery Smooth Muscle Cells, 1277

Connexin 45

Downregulation of Connexin 45 Gene Products During Mouse Heart Development, 1365

Contractility

Activation of Distinct cAMP-Dependent and cGMP-Dependent Pathways by Nitric Oxide in Cardiac Myocytes, 1020

Cardioprotection of Preconditioning by Metabolic Inhibition in the Rat Ventricular Myocyte: Involvement of κ-Opioid Receptor, 1388

Emigrated Neutrophils Regulate Ventricular Contractility via a4 Integrin, 1245

Contraction

Plasticity in the Dynamics of Myocardial Contraction: Ca2+, Crossbridge Kinetics, or Moiecular Cooperation, 862

Coronary disease

Plasminogen Is Not Required for Neointima Formation in a Mouse Model of Vein Graft Stenosis, 883

Coxsackievirus

Viral Myocarditis: Identification of Five Differentially Expressed Genes in Coxsackievirus B3-Infected Mouse Heart, 704

Creatine kinase

Adenylate Kinase-Catalyzed Phosphotransfer in the Myocardium: Increased Contribution in Heart Failure, 1137

Crossbridge kinetics

Altered Crossbridge Kinetics in the αMHC403/+ Mouse Model of Familial Hypertrophic Cardiomyopathy, 475

Cultured neuron

Angiotensin II Type 1 Receptor-Mediated Inhibition of K+ Channel Subunit Kv2.2 in Brain Stem and Hypothalamic Neurons, 352

Cyclic strain

Modulation of Ras/Raf/Extracellular Signal-Regulated Kinase Pathway by Reactive Oxygen Species Is Involved in Cyclic Strain-Induced Early Growth Response-1 Gene Expression in Endothelial Cells, 804

Rapid Induction and Translocation of Egr-1 in Response to Mechanical Strain in Vascular Smooth Muscle Cells, 678

Cyclooxygenase-1

Glucocorticoids Downregulate Cyclooxygenase-1 Gene Expression and Prostacyclin Synthesis in Fetal Pulmonary Artery Endothelium, 193

Cyclosporin A

Failure of Calcineurin Inhibitors to Prevent Pressure-Overload Left Ventricular Hypertrophy in Rats, 722

Cyclosporine

Calcineurin Inhibition as Therapy for Cardiac Hypertrophy and Heart Failure: Requiescat in Pace? 741

Pressure Overload Induces Severe Hypertrophy in Mice Treated With Cyclosporine, an Inhibitor of Calcineurin, 729

Prevention of Cardiac Hypertrophy by Calcineurin Inhibition: Hope or Hype? 623

Cytokine

Angiotensin II Induces Interleukin-6 Transcription in Vascular Smooth Muscle Cells Through Pleiotropic Activation of Nuclear Factor-kB Transcription Factors, 695

Tumor Necrosis Factor-\alpha Contributes to Ischemia- and Reperfusion-Induced Endothelial Activation in Isolated Hearts, 392

Cytotoxicity

Activation of p38 Mitogen-Activated Protein Kinase by Oxidized LDL in Vascular Smooth Muscle Cells: Mediation via Pertussis Toxin-Sensitive G Proteins and Association With Oxidized LDL-Induced Cytotoxicity, 831

D

Defibrillation

Electrical Restitution and Spatiotemporal Organization During Ventricular Fibrillation, 955

Delayed rectifier

Replacement by Homologous Recombination of the minK Gene With lacZ Reveals Restriction of minK Expression to the Mouse Cardiac Conduction System, 146

Cardiac Troponin I Gene Knockout: A Mouse Model of Myocardial Troponin I Deficiency, 1

Downregulation of Connexin 45 Gene Products During Mouse Heart Development, 1365

Expression and Distribution of the Type 1 and Type 3 Inositol 1,4,5-Trisphosphate Receptor in Developing Vascular Smooth Muscle, 536

Replacement by Homologous Recombination of the minK Gene With lacZ Reveals Restriction of minK Expression to the Mouse Cardiac Conduction System, 146

Dexrazoxane

Daunorubicin-Induced Apoptosis in Rat Cardiac Myocytes Is Inhibited by Dexrazoxane, 257

Diabetes

Activation of Receptor for Advanced Glycation End Products: A Mechanism for Chronic Vascular Dysfunction in Diabetic Vasculopathy and Atherosclerosis, 489

Diamide Molecular Mechanisms of Neutrophil-Endothelial Cell Adhesion Induced by Redox Imbalance, 516

Mechanically Driven Contour-Length Adjustment in Rat Cardiac Titin's Unique N2B Sequence: Titin Is an Adjustable Spring, 1339

Reduced Subendocardial Ryanodine Receptors and Consequent Effects on Cardiac Function in Conscious Dogs With Left Ventricular Hypertrophy, 999

Diazoxide

Role of Protein Kinase C in Mitochondrial KATP Channel-Mediated Protection Against Ca2+ Overload Injury in Rat Myocardium, 1156

Diethylenetriamine

Isoform-Selective Activation of Protein Kinase C by Nitric Oxide in the Heart of Conscious Rabbits: A Signaling Mechanism for Both Nitric Oxide-Induced and Ischemia-Induced Preconditioning, 587

Differential mRNA display

Viral Myocarditis: Identification of Five Differentially Expressed Genes in Coxsackievirus B3-Infected Mouse Heart, 704

Differentiation

The Definition of Cell Type, 1234

DiGeorge syndrome

HIRA, a DiGeorge Syndrome Candidate Gene, Is Required for Cardiac Outflow Tract Septation, 127

Molecular Genetics of Congenital Heart Disease: A Problem of Faulty Septation, 247

DNA binding protein

GC Factor 2 Represses Platelet-Derived Growth Factor A-Chain Gene Transcription and Is Itself Induced by Arterial Injury, 1258

DNA synthesis

Rho and Rho Kinase Mediate Thrombin-Stimulated Vascular Smooth Muscle Cell DNA Synthesis and Migration, 1186

E

Nitric Oxide-Independent Relaxations to Acetylcholine and A23187 Involve Different Routes of Heterocellular Communication: Role of Gap Junctions and Phospholipase A2, 53

Modulation of Ras/Raf/Extracellular Signal-Regulated Kinase Pathway by Reactive Oxygen Species Is Involved in Cyclic Strain-Induced Early Growth Response-1 Gene Expression in Endothelial Cells, 804

Elasticity

Mechanically Driven Contour-Length Adjustment in Rat Cardiac Titin's Unique N2B Sequence: Titin Is an Adjustable Spring, 1339

Electron transport

Potential Role of a Membrane-Bound NADH Oxidoreductase in Nitric Oxide Release and Arterial Relaxation to Nitroprusside, 220

Electrophysiology

Direct Demonstration of Exocytosis and Endocytosis in Single Mouse Juxtaglomerular Cells, 929

Potential Molecular Basis of Different Physiological Properties of the Transient Outward K⁺ Current in Rabbit and Human Atrial Myocytes, 551

Emigrated neutrophil

Emigrated Neutrophils Regulate Ventricular Contractility via α_4 Integrin, 1245

Endocytosis

Direct Demonstration of Exocytosis and Endocytosis in Single Mouse Juxtaglomerular Cells, 929

Endothelial cell

Endothelial Cells Modulate the Proliferation of Mural Cell Precursors via Platelet-Derived Growth Factor-BB and Heterotypic Cell Contact, 298

LOX-1, a Possible Clue to the Missing Link Between Hypertension and Atherogenesis, 1113

Mechanical Stimulation Regulates Voltage-Gated Potassium Currents in Cardiac Microvascular Endothelial Cells, 451

Modulation of Ras/Raf/Extracellular Signal-Regulated Kinase Pathway by Reactive Oxygen Species Is Involved in Cyclic Strain-Induced Early Growth Response-1 Gene Expression in Endothelial Cells, 804

Upregulation of Endothelial Receptor for Oxidized Low-Density Lipoprotein (LOX-1) in Cultured Human Coronary Artery Endothelial Cells by Angiotensin II Type 1 Receptor Activation, 1043

Endothelial differentiation

Identification and Cloning of a Secreted Protein Related to the Cysteine-Rich Domain of Frizzled: Evidence for a Role in Endothelial Cell Growth Control, 1433

Endothelial dysfunction

Effect of Recombinant Soluble P-Selectin Glycoprotein Ligand-I on Leukocyte-Endothelium Interaction In Vivo: Role in Rat Traumatic Shock, 93

Endothelial injury

Endothelial Injuries of Coronary Arteries Distal to Thrombotic Sites: Role of Adhesive Interaction Between Endothelial P-Selectin and Leukocyte Sialyl Lewis^X, 525

Endothelial nitric oxide synthase

Thinking Globally, Acting Locally: The Promise of Cardiovascular Gene Therapy, 1471

Endothelial nitric oxide synthase-derived nitric oxide

Endogenous Endothelial Nitric Oxide Synthase-Derived Nitric Oxide Is a Physiological Regulator of Myocardial Oxygen Consumption, 840

Endothelin

Evidence for Intracellular Endothelin-Converting Enzyme-2 Expression in Cultured Human Vascular Endothelial Cells, 891

Molecular Mechanisms of Endothelin-1-Induced Cell-Cycle Progression: Involvement of Extracellular Signal-Regulated Kinase, Protein Kinase C, and Phosphatidylinositol 3-Kinase at Distinct Points, 611

Endothelin-converting enzyme

Evidence for Intracellular Endothelin-Converting Enzyme-2 Expression in Cultured Human Vascular Endothelial Cells, 891

Endothelium

Evidence for Intracellular Endothelin-Converting Enzyme-2 Expression in Cultured Human Vascular Endothelial Cells, 891

Glucocorticoids Downregulate Cyclooxygenase-1 Gene Expression and Prostacyclin Synthesis in Fetal Pulmonary Artery Endothelium 193

Homocysteine Enhances Neutrophil-Endothelial Interactions in Both Cultured Human Cells and Rats In Vivo, 409

Identification of Endothelial Cell Binding Sites on the Laminin γl

Molecular Mechanisms of Neutrophil-Endothelial Cell Adhesion Induced by Redox Imbalance, 516 Phospholamban Is Present in Endothelial Cells and Modulates Endothelium-Dependent Relaxation: Evidence From Phospholamban Gene-Ablated Mice, 360

Endothelium-derived hyperpolarizing factor

Alteration of Endothelium-Dependent Hyperpolarizations in Porcine Coronary Arteries With Regenerated Endothelium, 371

Epidermal growth factor receptor

Angiotensin II-Induced Transactivation of Epidermal Growth Factor Receptor Regulates Fibronectin and Transforming Growth Factor-β Synthesis via Transcriptional and Posttranscriptional Mechanisms, 1073

Epoxyeicosatrienoic acid

Endothelium-Derived Hyperpolarizing Factors and Vascular Cytochrome P450 Metabolites of Arachidonic Acid in the Regulation of Tone, 484

ERK signaling pathway

Modulation of Ras/Raf/Extracellular Signal-Regulated Kinase Pathway by Reactive Oxygen Species Is Involved in Cyclic Strain-Induced Early Growth Response-1 Gene Expression in Endothelial Cells, 804

Essential hypertension

Structure of the Type B Human Natriuretic Peptide Receptor Gene and Association of a Novel Microsatellite Polymorphism With Essential Hypertension, 605

Estrogen

Estrogen and Tamoxifen Metabolites Protect Smooth Muscle Cell Membrane Phospholipids Against Peroxidation and Inhibit Cell Growth, 229

Localized Expression of Aromatase in Human Vascular Tissues, 1285 EVEC

EVEC, a Novel Epidermal Growth Factor-Like Repeat-Containing Protein Upregulated in Embryonic and Diseased Adult Vasculature. 1166

Excitation

A Novel Mechanism of Anode-Break Stimulation Predicted by Bidomain Modeling, 153

Excitation-contraction coupling

Mechanisms of Altered Excitation-Contraction Coupling in Canine Tachycardia-Induced Heart Failure, I: Experimental Studies, 562 Mechanisms of Altered Excitation-Contraction Coupling in Canine Tachycardia-Induced Heart Failure, II: Model Studies, 571

Exercise

Regulation of Myocardial Blood Flow by Oxygen Consumption Is Maintained in the Failing Heart During Exercise, 401

Exocytosis

Direct Demonstration of Exocytosis and Endocytosis in Single Mouse Juxtaglomerular Cells, 929

Extracellular matrix

Identification of Endothelial Cell Binding Sites on the Laminin γ1 Chain, 688

Regression of Hypertrophied Rat Pulmonary Arteries in Organ Culture Is Associated With Suppression of Proteolytic Activity, Inhibition of Tenascin-C, and Smooth Muscle Cell Apoptosis, 1223

Extracellular signal-regulated protein kinase

Caveolar Microdomains of the Sarcolemma: Compartmentation of Signaling Molecules Comes of Age, 1110

F

Fatty acid

Very Low-Density Lipoprotein Activates Nuclear Factor-κB in Endothelial Cells, 1085

Fatty acid-binding protein

A Concise Promoter Region of the Heart Fatty Acid–Binding Protein Gene Dictates Tissue-Appropriate Expression, 276

Feedback regulation

Local Ca²⁺ Entry Through L-Type Ca²⁺ Channels Activates Ca²⁺ Dependent K⁺ Channels in Rabbit Coronary Myocytes, 1032

Fibroblast growth factor-2

Vascular Remodeling in Response to Altered Blood Flow Is Mediated by Fibroblast Growth Factor-2, 323

Fibronectin

Blocking Very Late Antigen-4 Integrin Decreases Leukocyte Entry and Fatty Streak Formation in Mice Fed an Atherogenic Diet, 345

Fibrosis

Soluble Transforming Growth Factor-β Type II Receptor Inhibits Negative Remodeling, Fibroblast Transdifferentiation, and Intimal Lesion Formation But Not Endothelial Growth, 1212

Filament structure

Cardiac Myosin Binding Protein C, 1117

Finite element analysis

Balloon-Artery Interactions During Stent Placement: A Finite Element Analysis Approach to Pressure, Compliance, and Stent Design as Contributors to Vascular Injury, 378

Flow-mediated vasodilation

Gene Transfer of Endothelial Nitric Oxide Synthase to the Lung of the Mouse In Vivo: Effect on Agonist-Induced and Flow-Mediated Vascular Responses, 1422

Force generation

Cardiac Myosin Binding Protein C, 1117

Free radical

Chemiluminescent Detection of Oxidants in Vascular Tissue: Lucigenin But Not Coelenterazine Enhances Superoxide Formation, 1203

Estrogen and Tamoxifen Metabolites Protect Smooth Muscle Cell Membrane Phospholipids Against Peroxidation and Inhibit Cell Growth, 229

Functional recovery

Intracellular Sodium Accumulation During Ischemia as the Substrate for Reperfusion Injury, 1401

Functional reentry

Incidence, Evolution, and Spatial Distribution of Functional Reentry During Ventricular Fibrillation in Pigs, 945

G

G protein-coupled receptor

Caveolar Microdomains of the Sarcolemma: Compartmentation of Signaling Molecules Comes of Age, 1110

Gap junction

Analysis of the Presence and Physiological Relevance of Subconducting States of Connexin43-Derived Gap Junction Channels in Cultured Human Corporal Vascular Smooth Muscle Cells, 797

Multiple Connexins Form Gap Junction Channels in Rat Basilar Artery Smooth Muscle Cells, 1277

Nitric Oxide-Independent Relaxations to Acetylcholine and A23187 Involve Different Routes of Heterocellular Communication: Role of Gap Junctions and Phospholipase A₂, 53

GC factor 2

GC Factor 2 Represses Platelet-Derived Growth Factor A-Chain Gene Transcription and Is Itself Induced by Arterial Injury, 1258

Gene expression

Cosegregation Analysis in Genetic Crosses Suggests a Protective Role for Atrial Natriuretic Factor Against Ventricular Hypertrophy. 1453

Distinct Renin Isoforms Generated by Tissue-Specific Transcription Initiation and Alternative Splicing, 240

Evidence for a Vasopressin System in the Rat Heart, 365

Regulation of Smooth Muscle α-Actin Expression In Vivo Is Dependent on CArG Elements Within the 5' and First Intron Promoter Regions, 852

Reversal of GATA-6 Downregulation Promotes Smooth Muscle Differentiation and Inhibits Intimal Hyperplasia in Balloon-Injured Rat Carotid Artery, 647

Transcription Factor Decoy to Study the Molecular Mechanism of Negative Regulation of Renin Gene Expression in the Liver In Vivo, 1059

Gene knockout

Plasminogen Is Not Required for Neointima Formation in a Mouse Model of Vein Graft Stenosis, 883

Gene structur

Structure of the Type B Human Natriuretic Peptide Receptor Gene and Association of a Novel Microsatellite Polymorphism With Essential Hypertension, 605

Gene-targeted mice

Monocyte Rolling in Early Atherogenesis: Vital Role in Lesion Development, 1353

Gene therapy

Local Overexpression of Thrombomodulin for In Vivo Prevention of Arterial Thrombosis in a Rabbit Model, 84

Thinking Globally, Acting Locally: The Promise of Cardiovascular Gene Therapy, 1471

Gene transfer

Adenovirus-Mediated Local Expression of Human Tissue Factor Pathway Inhibitor Eliminates Shear Stress-Induced Recurrent Thrombosis in the Injured Carotid Artery of the Rabbit, 1446

Gene Transfer of Endothelial Nitric Oxide Synthase to the Lung of the Mouse In Vivo: Effect on Agonist-Induced and Flow-Mediated Vascular Responses, 1422

Nuclear Factor-κB Regulates Induction of Apoptosis and Inhibitor of Apoptosis Protein-1 Expression in Vascular Smooth Muscle Cells, 668

Genes

Rapid Induction and Translocation of Egr-1 in Response to Mechanical Strain in Vascular Smooth Muscle Cells, 678

Reversal of GATA-6 Downregulation Promotes Smooth Muscle Differentiation and Inhibits Intimal Hyperplasia in Balloon-Injured Rat Carotid Artery, 647

Glucocorticoid

Glucocorticoids Downregulate Cyclooxygenase-1 Gene Expression and Prostacyclin Synthesis in Fetal Pulmonary Artery Endothelium, 193

Glucose tracer

α-Adrenergic Stimulation Mediates Glucose Uptake Through Phosphatidylinositol 3-Kinase in Rat Heart, 467

Glucose transporter

Contribution of α -Adrenergic and β -Adrenergic Stimulation to Ischemia-Induced Glucose Transporter (GLUT) 4 and GLUT1 Translocation in the Isolated Perfused Rat Heart, 1407

Glutathione

Molecular Mechanisms of Neutrophil-Endothelial Cell Adhesion Induced by Redox Imbalance, 516

Glycoprotein 130

Mechanical Stretch Activates the JAK/STAT Pathway in Rat Cardiomyocytes, 1127

Glycoxidation

Activation of Receptor for Advanced Glycation End Products: A Mechanism for Chronic Vascular Dysfunction in Diabetic Vasculopathy and Atherosclerosis, 489

Graph theory

Incidence, Evolution, and Spatial Distribution of Functional Reentry During Ventricular Fibrillation in Pigs, 945

Growth substance

Vascular Endothelial Growth Factor Induces Activation and Subcellular Translocation of Focal Adhesion Kinase (p125^{FAK}) in Cultured Rat Cardiac Myocytes, 1194

GTP

Structural Plasticity of the Cardiac Nuclear Pore Complex in Response to Regulators of Nuclear Import, 1292

GTP-cyclohydrolase I

Anoxia/Reoxygenation-Induced Tolerance With Respect to Polymorphonuclear Leukocyte Adhesion to Cultured Endothelial Cells: A Nuclear Factor-κB-Mediated Phenomenon, 103

Guanylate cyclase

Potential Role of a Membrane-Bound NADH Oxidoreductase in Nitric Oxide Release and Arterial Relaxation to Nitroprusside, 220

H

Heart

Cardiac Myosin Binding Protein C, 1117

Contribution of α-Adrenergic and β-Adrenergic Stimulation to Ischemia-Induced Glucose Transporter (GLUT) 4 and GLUT1 Translocation in the Isolated Perfused Rat Heart, 1407

Downregulation of Connexin 45 Gene Products During Mouse Heart Development, 1365

Evidence for a Vasopressin System in the Rat Heart, 365

Mechanisms of Deficient Cardiac Septation in the Mouse With Trisomy 16, 897

Purification and Preliminary Characterization of a Cardiac Kv1.5 Repressor Element Binding Factor, 937

Heart failure

- Adenylate Kinase-Catalyzed Phosphotransfer in the Myocardium: Increased Contribution in Heart Failure, 1137
- Cardiac Troponin I Gene Knockout: A Mouse Model of Myocardial Troponin I Deficiency, 1
- Mechanisms of Altered Excitation-Contraction Coupling in Canine Tachycardia-Induced Heart Failure, I: Experimental Studies, 562 Mechanisms of Altered Excitation-Contraction Coupling in Canine
- Tachycardia-Induced Heart Failure, II: Model Studies, 571 Modulation of Iron Uptake in Heart by L-Type Ca²⁺ Channel Modifiers: Possible Implications in Iron Overload, 1302
- Regulation of Myocardial Blood Flow by Oxygen Consumption Is Maintained in the Failing Heart During Exercise, 401
- Regulation of Sympathetic Nerve Activity in Heart Failure: A Role for Nitric Oxide and Angiotensin II, 417
- The Sarcoplasmic Reticulum and the Na⁺/Ca²⁺ Exchanger Both Contribute to the Ca²⁺ Transient of Failing Human Ventricular Myocytes, 435
- Troponin I, Stunning, Hypertrophy, and Failure of the Heart, 122

Heart structure

- Examination of the Transverse Tubular System in Living Cardiac Rat Myocytes by 2-Photon Microscopy and Digital Image-Processing Techniques, 266
- Hemagglutinating virus of Japan liposome
 - Transcription Factor Decoy to Study the Molecular Mechanism of Negative Regulation of Renin Gene Expression in the Liver In Vivo, 1059

Hemopoietic growth factor

Thrombopoietin Stimulates Endothelial Cell Motility and Neoangiogenesis by a Platelet-Activating Factor-Dependent Mechanism, 785

Heparin

Endothelial Implants Inhibit Intimal Hyperplasia After Porcine Angioplasty, 384

Heparin proteoglycan

Heparin Proteoglycans Released From Rat Serosal Mast Cells Inhibit Proliferation of Rat Aortic Smooth Muscle Cells in Culture, 74

HERG

Mechanism of Block and Identification of the Verapamil Binding Domain to HERG Potassium Channels, 989

Hetero-domain interaction

Hetero-Domain Interactions as a Mechanism for the Regulation of Connexin Channels, 1144

HIRA

- HIRA, a DiGeorge Syndrome Candidate Gene, Is Required for Cardiac Outflow Tract Septation, 127
- Molecular Genetics of Congenital Heart Disease: A Problem of Faulty Septation, 247

Homocystinuria

Homocysteine Enhances Neutrophil-Endothelial Interactions in Both Cultured Human Cells and Rats In Vivo, 409

Human cardiac and skeletal muscle

Identification and Expression of δ -Isoforms of the Multifunctional $Ca^{2+}/Calmodulin$ -Dependent Protein Kinase in Failing and Nonfailing Human Myocardium, 713

Human umbilical vein endothelial cell

Exposure of Human Vascular Endothelial Cells to Sustained Hydrostatic Pressure Stimulates Proliferation: Involvement of the α_V Integrins, 315

Hydrostatic pressure

Exposure of Human Vascular Endothelial Cells to Sustained Hydrostatic Pressure Stimulates Proliferation: Involvement of the α_V Integrins, 315

20-Hydroxyeicosatetraenoic acid

Endothelium-Derived Hyperpolarizing Factors and Vascular Cytochrome P450 Metabolites of Arachidonic Acid in the Regulation of Tone, 484

5-Hydroxytryptamine transporter

Induction of Serotonin Transporter by Hypoxia in Pulmonary Vascular Smooth Muscle Cells: Relationship With the Mitogenic Action of Serotonin, 329

Hypercholesterolemia

Monocyte Rolling in Early Atherogenesis: Vital Role in Lesion Development, 1353 Vitaxin, a Humanized Monoclonal Antibody to the Vitronectin Receptor (α, β_3) , Reduces Neointimal Hyperplasia and Total Vessel Area After Balloon Injury in Hypercholesterolemic Rabbits, 1268

Hyperhomocysteinemia

Homocysteine Enhances Neutrophil-Endothelial Interactions in Both Cultured Human Cells and Rats In Vivo, 409

Hypertension

- Mitogen-Activated Protein/Extracellular Signal-Regulated Kinase Inhibition Attenuates Angiotensin II-Mediated Signaling and Contraction in Spontaneously Hypertensive Rat Vascular Smooth Muscle Cells, 505
- Proadrenomedullin N-Terminal 20 Peptide Hyperpolarizes the Membrane by Activating an Inwardly Rectifying K⁺ Current in Differentiated PC12 Cells, 445

Hypertrophy

- Cellular Mechanisms of Altered Contractility in the Hypertrophied Heart: Big Hearts, Big Sparks, 424
- Mechanical Stretch Activates the JAK/STAT Pathway in Rat Cardiomyocytes, 1127
- Pressure Overload Induces Severe Hypertrophy in Mice Treated With Cyclosporine, an Inhibitor of Calcineurin, 729
- Prevention of Cardiac Hypertrophy by Calcineurin Inhibition: Hope or Hype? 623
- Rho Family Small G Proteins Play Critical Roles in Mechanical Stress-Induced Hypertrophic Responses in Cardiac Myocytes, 458
- Troponin I, Stunning, Hypertrophy, and Failure of the Heart, 122

Hypertrophy, left ventricular

Cosegregation Analysis in Genetic Crosses Suggests a Protective Role for Atrial Natriuretic Factor Against Ventricular Hypertrophy, 1453

Hypo-osmotic stress

Chloride Channel Inhibition Blocks the Protection of Ischemic Preconditioning and Hypo-Osmotic Stress in Rabbit Ventricular Myocardium, 763

Hypoxia

Induction of Serotonin Transporter by Hypoxia in Pulmonary Vascular Smooth Muscle Cells: Relationship With the Mitogenic Action of Serotonin, 329

I

Imaging

Examination of the Transverse Tubular System in Living Cardiac Rat Myocytes by 2-Photon Microscopy and Digital Image-Processing Techniques, 266

In situ hybridization

Localized Expression of Aromatase in Human Vascular Tissues, 1285

In vive

Gene Transfer of Endothelial Nitric Oxide Synthase to the Lung of the Mouse In Vivo: Effect on Agonist-Induced and Flow-Mediated Vascular Responses, 1422

Indo 1 fluorescence

Local Ca²⁺ Entry Through L-Type Ca²⁺ Channels Activates Ca²⁺Dependent K⁺ Channels in Rabbit Coronary Myocytes, 1032

Inducible nitric oxide synthase

Nuclear Factor-κB Plays an Essential Role in the Late Phase of Ischemic Preconditioning in Conscious Rabbits, 1095

nfarction

Physiological Basis for Potassium (³⁹K) Magnetic Resonance Imaging of the Heart, 913

Inflammation

Activation of Receptor for Advanced Glycation End Products: A Mechanism for Chronic Vascular Dysfunction in Diabetic Vasculopathy and Atherosclerosis, 489

Inhibite

Adenovirus-Mediated Local Expression of Human Tissue Factor Pathway Inhibitor Eliminates Shear Stress-Induced Recurrent Thrombosis in the Injured Carotid Artery of the Rabbit, 1446

Inhibitory.cB

Liposomal Delivery of Purified Inhibitory-κΒα Inhibits Tumor Necrosis Factor-α-Induced Human Vascular Smooth Muscle Proliferation, 867

Inhibitory G protein

Coupling of β₂-Adrenoceptor to G_i Proteins and Its Physiological Relevance in Murine Cardiac Myocytes, 43

Injury

GC Factor 2 Represses Platelet-Derived Growth Factor A-Chain Gene Transcription and Is Itself Induced by Arterial Injury, 1258

Ins(1,4,5)P₃

Expression and Distribution of the Type 1 and Type 3 Inositol 1,4,5-Trisphosphate Receptor in Developing Vascular Smooth Muscle, 536

Insulin

Hetero-Domain Interactions as a Mechanism for the Regulation of Connexin Channels, 1144

Insulin-like growth factor-1

Overexpression of Insulin-Like Growth Factor-1 Attenuates the Myocyte Renin-Angiotensin System in Transgenic Mice, 752

Insulin-like growth factor-1 transgenic mice

Insulin-Like Growth Factor-1 Attenuates the Detrimental Impact of Nonocclusive Coronary Artery Constriction on the Heart, 1007

 α_4 integrin

Emigrated Neutrophils Regulate Ventricular Contractility via α₄ Integrin, 1245

Exposure of Human Vascular Endothelial Cells to Sustained Hydrostatic Pressure Stimulates Proliferation: Involvement of the $\alpha_{\rm V}$ Integrins, 315

Intima

Vascular Remodeling in Response to Altered Blood Flow Is Mediated by Fibroblast Growth Factor-2, 323

Intimal hyperplasia

Plasminogen Is Not Required for Neointima Formation in a Mouse Model of Vein Graft Stenosis, 883

Soluble Transforming Growth Factor-β Type II Receptor Inhibits Negative Remodeling, Fibroblast Transdifferentiation, and Intimal Lesion Formation But Not Endothelial Growth, 1212

Intracellular signaling

Contribution of α -Adrenergic and β -Adrenergic Stimulation to Ischemia-Induced Glucose Transporter (GLUT) 4 and GLUT1 Translocation in the Isolated Perfused Rat Heart, 1407

Intravital microscopy

Effect of Recombinant Soluble P-Selectin Glycoprotein Ligand-1 on Leukocyte-Endothelium Interaction In Vivo: Role in Rat Traumatic Shock, 93

Ion channel gating

Swelling-Activated Chloride Current Is Persistently Activated in Ventricular Myocytes From Dogs With Tachycardia-Induced Congestive Heart Failure, 157

Iron overload

Modulation of Iron Uptake in Heart by L-Type Ca²⁺ Channel Modifiers: Possible Implications in Iron Overload, 1302

Ischemia

Cardiac Troponin I Gene Knockout: A Mouse Model of Myocardial Troponin I Deficiency, 1

Contribution of α-Adrenergic and β-Adrenergic Stimulation to Ischemia-Induced Glucose Transporter (GLUT) 4 and GLUT1 Translocation in the Isolated Perfused Rat Heart, 1407

Tumor Necrosis Factor- α Contributes to Ischemia- and Reperfusion-Induced Endothelial Activation in Isolated Hearts, 392

Ischemia/reperfusion

Emigrated Neutrophils Regulate Ventricular Contractility via α_4 Integrin, 1245

Ischemic preconditioning

Chloride Channel Inhibition Blocks the Protection of Ischemic Preconditioning and Hypo-Osmotic Stress in Rabbit Ventricular Myocardium, 763

Sarcolemmal Versus Mitochondrial ATP-Sensitive K⁺ Channels and Myocardial Preconditioning, 973

Isolated myocyte

The Sarcoplasmic Reticulum and the Na⁺/Ca²⁺ Exchanger Both Contribute to the Ca²⁺ Transient of Failing Human Ventricular Myocytes, 435

Isolated working rat heart

α-Adrenergic Stimulation Mediates Glucose Uptake Through Phosphatidylinositol 3-Kinase in Rat Heart, 467 J

JAK/STAT pathway

Mechanical Stretch Activates the JAK/STAT Pathway in Rat Cardiomyocytes, 1127

Jak2

The Angiotensin II-Dependent Association of Jak2 and c-Src Requires the N-Terminus of Jak2 and the SH2 Domain of c-Src, 1332

Juxtaglomerular apparatus

Direct Demonstration of Exocytosis and Endocytosis in Single Mouse Juxtaglomerular Cells, 929

K

 K^+

Molecular Mechanisms Underlying Ionic Remodeling in a Dog Model of Atrial Fibrillation, 776

Physiological Basis for Potassium $(^{39}{\rm K})$ Magnetic Resonance Imaging of the Heart, 913

K+ channel

Endothelium-Derived Hyperpolarizing Factors and Vascular Cytochrome P450 Metabolites of Arachidonic Acid in the Regulation of Tone, 484

Genomic Organization of the KCNQ1 K⁺ Channel Gene and Identification of C-Terminal Mutations in the Long-QT Syndrome, 290 Molecular Identity of I₁₀: Kv1.4 Redux, 620

Purification and Preliminary Characterization of a Cardiac Kv1.5 Repressor Element Binding Factor, 937

Role of Protein Kinase C in Mitochondrial K_{ATP} Channel-Mediated Protection Against Ca²⁺ Overload Injury in Rat Myocardium. 1156

K+ current

Replacement by Homologous Recombination of the *minK* Gene With *lacZ* Reveals Restriction of *minK* Expression to the Mouse Cardiac Conduction System, 146

KCNQ1

Genomic Organization of the KCNQ1 K⁺ Channel Gene and Identification of C-Terminal Mutations in the Long-QT Syndrome, 290

Kinase, extracellular signal-related

Molecular Mechanisms of Endothelin-1-Induced Cell-Cycle Progression: Involvement of Extracellular Signal-Regulated Kinase, Protein Kinase C, and Phosphatidylinositol 3-Kinase at Distinct Points, 611

Kinetics

Plasticity in the Dynamics of Myocardial Contraction: Ca²⁺, Crossbridge Kinetics, or Molecular Cooperation, 862

Kv1.5

Purification and Preliminary Characterization of a Cardiac Kv1.5 Repressor Element Binding Factor, 937

Kv2.2

Angiotensin II Type 1 Receptor-Mediated Inhibition of K⁺ Channel Subunit Kv2.2 in Brain Stem and Hypothalamic Neurons, 352

Kv3.1b AT₁ receptor

Angiotensin II Type 1 Receptor-Mediated Inhibition of K⁺ Channel Subunit Kv2.2 in Brain Stem and Hypothalamic Neurons, 352 KVLOT1

Genomic Organization of the KCNQ1 K+ Channel Gene and Identification of C-Terminal Mutations in the Long-QT Syndrome, 290

L

L-type Ca2+ channel

Establishment of β -Adrenergic Modulation of L-Type Ca²⁺ Current in the Early Stages of Cardiomyocyte Development, 136

L-type Ca2+ current

Coupling of β_2 -Adrenoceptor to G_i Proteins and Its Physiological Relevance in Murine Cardiac Myocytes, 43

Laminin

Identification of Endothelial Cell Binding Sites on the Laminin γl

Chain, 688 Left ventricular hypertrophy

Cyclosporine Attenuates Pressure-Overload Hypertrophy in Mice While Enhancing Susceptibility to Decompensation and Heart Failure. 735

Failure of Calcineurin Inhibitors to Prevent Pressure-Overload Left Ventricular Hypertrophy in Rats, 722

Leukocyte

Homocysteine Enhances Neutrophil-Endothelial Interactions in Both Cultured Human Cells and Rats In Vivo, 409

 $\begin{array}{c} \textbf{Local channel regulation} \\ \textbf{Local Ca}^{2+} \textbf{ Entry Through L-Type } \textbf{ Ca}^{2+} \textbf{ Channels Activates } \textbf{ Ca}^{2+}. \end{array}$ Dependent K+ Channels in Rabbit Coronary Myocytes, 1032

Long-QT syndrome

Genomic Organization of the KCNQ1 K+ Channel Gene and Identification of C-Terminal Mutations in the Long-QT Syndrome, 290

Low-/high-[Ca], reperfusion

Intracellular Sodium Accumulation During Ischemia as the Substrate for Reperfusion Injury, 1401

LOX-1

LOX-1, a Possible Clue to the Missing Link Between Hypertension and Atherogenesis, 1113

Lucigenin

Chemiluminescent Detection of Oxidants in Vascular Tissue: Lucigenin But Not Coelenterazine Enhances Superoxide Formation, 1203

M

Macrophage

Anti-Monocyte Chemoattractant Protein-1/Monocyte Chemotactic and Activating Factor Antibody Inhibits Neointimal Hyperplasia in Injured Rat Carotid Arteries, 306

Tissue-Destructive Macrophages in Giant Cell Arteritis, 1050

Mast cell

Heparin Proteoglycans Released From Rat Serosal Mast Cells Inhibit Proliferation of Rat Aortic Smooth Muscle Cells in Culture, 74

Overexpression of Insulin-Like Growth Factor-1 Attenuates the Myocyte Renin-Angiotensin System in Transgenic Mice, 752

Mechanical stimulation

Rapid Induction and Translocation of Egr-1 in Response to Mechanical Strain in Vascular Smooth Muscle Cells, 678

Rho Family Small G Proteins Play Critical Roles in Mechanical Stress-Induced Hypertrophic Responses in Cardiac Myo-

Mechanical stretch

Mechanical Stretch Activates the JAK/STAT Pathway in Rat Cardiomyocytes, 1127

Mechanotransduction

Exposure of Human Vascular Endothelial Cells to Sustained Hydrostatic Pressure Stimulates Proliferation: Involvement of the av Integrins, 315

Metabolism

Estrogen and Tamoxifen Metabolites Protect Smooth Muscle Cell Membrane Phospholipids Against Peroxidation and Inhibit Cell Growth, 229

Metalloproteinase

Tissue-Destructive Macrophages in Giant Cell Arteritis, 1050

Altered Crossbridge Kinetics in the αMHC403/+ Mouse Model of Familial Hypertrophic Cardiomyopathy, 475

Deficient Platelet-Derived Nitric Oxide and Enhanced Hemostasis in Mice Lacking the NOSIII Gene, 1416

Gene Transfer of Endothelial Nitric Oxide Synthase to the Lung of the Mouse In Vivo: Effect on Agonist-Induced and Flow-Mediated Vascular Responses, 1422

Mechanisms of Deficient Cardiac Septation in the Mouse With Trisomy 16, 897

Pressure Overload Induces Severe Hypertrophy in Mice Treated With Cyclosporine, an Inhibitor of Calcineurin, 729

Correlation Between Myofilament Response to Ca2+ and Altered Dynamics of Contraction and Relaxation in Transgenic Cardiac Cells That Express β-Tropomyosin, 745

Overexpression of Insulin-Like Growth Factor-1 Attenuates the Myocyte Renin-Angiotensin System in Transgenic Mice, 752

Regulation of Smooth Muscle α-Actin Expression In Vivo Is Dependent on CArG Elements Within the 5' and First Intron Promoter Regions, 852

Microscopy

Structural Plasticity of the Cardiac Nuclear Pore Complex in Response to Regulators of Nuclear Import, 1292

Midmyocardial ventricular action potential

Mechanisms of Altered Excitation-Contraction Coupling in Canine Tachycardia-Induced Heart Failure, II: Model Studies, 571

Migration

Nitric Oxide and C-Type Atrial Natriuretic Peptide Stimulate Primary Aortic Smooth Muscle Cell Migration via a cGMP-Dependent Mechanism: Relationship to Microfilament Dissociation and Altered Cell Morphology, 655

Mitochondria

Adenylate Kinase-Catalyzed Phosphotransfer in the Myocardium: Increased Contribution in Heart Failure, 1137

An Alternative Transcript of the Rat Renin Gene Can Result in a Truncated Prorenin That Is Transported Into Adrenal Mitochondria, 337

Opioid-Induced Second Window of Cardioprotection: Potential Role of Mitochondrial KATP Channels, 846

Sarcolemmal Versus Mitochondrial ATP-Sensitive K+ Channels and Myocardial Preconditioning, 973

Mitogen-activated protein kinase cascade

Signaling in Myocardial Hypertrophy: Life After Calcineurin? 633

Model, genetic

Cosegregation Analysis in Genetic Crosses Suggests a Protective Role for Atrial Natriuretic Factor Against Ventricular Hypertrophy, 1453

Molecular biology

Eight Years Behind the Masthead, 1361

Molecular Identity of Ito: Kv1.4 Redux, 620

Molecular Mechanisms Underlying Ionic Remodeling in a Dog Model of Atrial Fibrillation, 776

Monocyte

Blocking Very Late Antigen-4 Integrin Decreases Leukocyte Entry and Fatty Streak Formation in Mice Fed an Atherogenic Diet, 345

Direct Demonstration of P-Selectin- and VCAM-1-Dependent Mononuclear Cell Rolling in Early Atherosclerotic Lesions of Apolipoprotein E-Deficient Mice, 1237

Monocyte Rolling in Early Atherogenesis: Vital Role in Lesion Development, 1353

Monocyte chemoattractant protein-1/monocyte chemotactic and activating factor

Anti-Monocyte Chemoattractant Protein-1/Monocyte Chemotactic and Activating Factor Antibody Inhibits Neointimal Hyperplasia in Injured Rat Carotid Arteries, 306

Morphine

Direct Preconditioning of Cardiac Myocytes via Opioid Receptors and K_{ATP} Channels, 1396

Physiological Basis for Potassium (39K) Magnetic Resonance Imaging of the Heart, 913

mRNA

Effect of Recombinant Soluble P-Selectin Glycoprotein Ligand-1 on Leukocyte-Endothelium Interaction In Vivo: Role in Rat Traumatic Shock, 93

Muscle contraction

Effects of Myosin Heavy Chain Isoform Switching on Ca2+-Activated Tension Development in Single Adult Cardiac Myocytes, 1310

Muscle, smooth

Anti-Monocyte Chemoattractant Protein-1/Monocyte Chemotactic and Activating Factor Antibody Inhibits Neointimal Hyperplasia in Injured Rat Carotid Arteries, 306

Calcification of Vascular Smooth Muscle Cell Cultures: Inhibition by Osteopontin, 166

Endothelial Cells Modulate the Proliferation of Mural Cell Precursors via Platelet-Derived Growth Factor-BB and Heterotypic Cell Contact, 298

Heparin Proteoglycans Released From Rat Serosal Mast Cells Inhibit Proliferation of Rat Aortic Smooth Muscle Cells in Culture, 74

Localized Expression of Aromatase in Human Vascular Tissues, 1285 Osteopontin: Between a Rock and a Hard Plaque, 250

Regulation of Smooth Muscle α-Actin Expression In Vivo Is Dependent on CArG Elements Within the 5' and First Intron Promoter Regions, 852

- Reversal of GATA-6 Downregulation Promotes Smooth Muscle Differentiation and Inhibits Intimal Hyperplasia in Balloon-Injured Rat Carotid Artery, 647
- Soluble Transforming Growth Factor-β Type II Receptor Inhibits Negative Remodeling, Fibroblast Transdifferentiation, and Intimal Lesion Formation But Not Endothelial Growth, 1212
- Tranilast Inhibits Vascular Smooth Muscle Cell Growth and Intimal Hyperplasia by Induction of p21wafl/cipl/sdil and p53, 543
- Vascular Remodeling in Response to Altered Blood Flow Is Mediated by Fibroblast Growth Factor-2, 323
- Muscle, smooth, vascular
 - Activation of p38 Mitogen-Activated Protein Kinase by Oxidized LDL in Vascular Smooth Muscle Cells: Media ion via Pertussis Toxin-Sensitive G Proteins and Association With Oxidized LDL-Induced Cytotoxicity, 831
 - Expression and Distribution of the Type 1 and Type 3 Inositol 1,4,5-Trisphosphate Receptor in Developing Vascular Smooth Muscle, 536
- Liposomal Delivery of Purified Inhibitory-κBα Inhibits Tumor Necrosis Factor-α-Induced Human Vascular Smooth Muscle Proliferation, 867
- Local Ca²⁺ Entry Through L-Type Ca²⁺ Channels Activates Ca²⁺ Dependent K+ Channels in Rabbit Coronary Myocytes, 1032
- Mechanism of Nitric Oxide-Induced Vasodilatation: Refilling of Intracellular Stores by Sarcoplasmic Reticulum Ca²⁺ ATPase and Inhibition of Store-Operated Ca²⁺ Influx, 210
- Multiple Connexins Form Gap Junction Channels in Rat Basilar Artery Smooth Muscle Cells, 1277
- Nitric Oxide and C-Type Atrial Natriuretic Peptide Stimulate Primary Aortic Smooth Muscle Cell Migration via a cGMP-Dependent
- Rapid Induction and Translocation of Egr-1 in Response to Mechanical Strain in Vascular Smooth Muscle Cells, 678
- TIMP-4 Is Regulated by Vascular Injury in Rats, 498
- Myeloperoxidase activity
- Effect of Recombinant Soluble P-Selectin Glycoprotein Ligand-1 on Leukocyte-Endothelium Interaction In Vivo: Role in Rat Traumatic Shock, 93
- Myocardial adaptation
 - Nuclear Factor-κB Plays an Essential Role in the Late Phase of Ischemic Preconditioning in Conscious Rabbits, 1095
- Myocardial compliance
 - Mechanically Driven Contour-Length Adjustment in Rat Cardiac Titin's Unique N2B Sequence: Titin Is an Adjustable Spring, 1339
- Myocardial hypertrophy and failure
- Signaling in Myocardial Hypertrophy: Life After Calcineurin? 633
- Myocardial infarction
 - Chloride Channel Inhibition Blocks the Protection of Ischemic Preconditioning and Hypo-Osmotic Stress in Rabbit Ventricular Myocardium, 763
- Myocardial ischemia
 - Acid-Evoked Currents in Cardiac Sensory Neurons: A Possible Mediator of Myocardial Ischemic Sensation, 921
 - Insulin-Like Growth Factor-1 Attenuates the Detrimental Impact of Nonocclusive Coronary Artery Constriction on the Heart, 1007
- Nonoccusive Coronary Artery Constriction on the Heart, 1007
 Troponin I Degradation and Covalent Complex Formation Accompanies Myocardial Ischemia/Reperfusion Injury, 9
- Myocardial ischemia/reperfusion
- Nuclear Factor-κB Plays an Essential Role in the Late Phase of Ischemic Preconditioning in Conscious Rabbits, 1095
- Myocarditis
 - Viral Myocarditis: Identification of Five Differentially Expressed Genes in Coxsackievirus B3-Infected Mouse Heart, 704
- Myocardium
 - Plasticity in the Dynamics of Myocardial Contraction: Ca²⁺, Crossbridge Kinetics, or Molecular Cooperation, 862
- Myocyte
 - Cardioprotection of Preconditioning by Metabolic Inhibition in the Rat Ventricular Myocyte: Involvement of κ-Opioid Receptor, 1388
 - A Concise Promoter Region of the Heart Fatty Acid-Binding Protein Gene Dictates Tissue-Appropriate Expression, 276
 - Correlation Between Myofilament Response to Ca²⁺ and Altered Dynamics of Contraction and Relaxation in Transgenic Cardiac Cells That Express β-Tropomyosin, 745

- Direct Preconditioning of Cardiac Myocytes via Opioid Receptors and KATP Channels, 1396
- Emigrated Neutrophils Regulate Ventricular Contractility via α₄ Inte-
- Examination of the Transverse Tubular System in Living Cardiac Rat Myocytes by 2-Photon Microscopy and Digital Image-Processing Techniques, 266
- Physiological Basis for Potassium (39K) Magnetic Resonance Imaging of the Heart, 913
- Myocyte death
 - Insulin-Like Growth Factor-1 Attenuates the Detrimental Impact of Nonocclusive Coronary Artery Constriction on the Heart, 1007
- Myofibroblast
 - Soluble Transforming Growth Factor-β Type II Receptor Inhibits
 Negative Remodeling, Fibroblast Transdifferentiation, and Intimal Lesion Formation But Not Endothelial Growth, 1212
- Myofilament
- Troponin I Degradation and Covalent Complex Formation Accompanies Myocardial Ischemia/Reperfusion Injury, 9
- Myosin
- Effects of Myosin Heavy Chain Isoform Switching on Ca²⁺-Activated Tension Development in Single Adult Cardiac Myocytes, 1310
- Myosin binding protein C
- Cardiac Myosin Binding Protein C, 1117
- Myosin isoform
- Insulin-Like Growth Factor-1 Attenuates the Detrimental Impact of Nonocclusive Coronary Artery Constriction on the Heart, 1007 Myosin mutation
- Altered Crossbridge Kinetics in the αMHC^{403/+} Mouse Model of Familial Hypertrophic Cardiomyopathy, 475

N

- N^{ω} -nitro-L-arginine
 - Isoform-Selective Activation of Protein Kinase C by Nitric Oxide in the Heart of Conscious Rabbits: A Signaling Mechanism for Both Nitric Oxide-Induced and Ischemia-Induced Preconditioning, 587
- Na⁺/Ca²⁺ exchange
- Calmodulin Kinase Inhibition Prevents Development of the Arrhythmogenic Transient Inward Current, 906
- The Sarcoplasmic Reticulum and the Na*/Ca²+ Exchanger Both Contribute to the Ca²+ Transient of Failing Human Ventricular Myocytes, 435
- Sodium Regulation During Ischemia Versus Reperfusion and Its Role in Injury, 1469
- [Na+]
- Intracellular Sodium Accumulation During Ischemia as the Substrate for Reperfusion Injury, 1401
- ²³Na nuclear magnetic resonance spectroscopy
- Intracellular Sodium Accumulation During Ischemia as the Substrate for Reperfusion Injury, 1401
- Natriuretic peptide
 - Structure of the Type B Human Natriuretic Peptide Receptor Gene and Association of a Novel Microsatellite Polymorphism With Essential Hypertension, 605
- Negative regulatory element
 - Transcription Factor Decoy to Study the Molecular Mechanism of Negative Regulation of Renin Gene Expression in the Liver In Vivo. 1059
- Neointimal hyperplasia
 - Strain Differences in Neointimal Hyperplasia in the Rat, 1252
- Neovascularization
 - Thrombopoietin Stimulates Endothelial Cell Motility and Neoangiogenesis by a Platelet-Activating Factor-Dependent Mechanism, 785
- Neuregulin
 - Neuregulin Signaling in the Heart: Dynamic Targeting of erbB4 to Caveolar Microdomains in Cardiac Myocytes, 1380
- Neutrophil
 - Molecular Mechanisms of Neutrophil-Endothelial Cell Adhesion Induced by Redox Imbalance, 516
- NFAT
 - Prevention of Cardiac Hypertrophy by Calcineurin Inhibition: Hope or Hype? 623

Nitric oxide

- Anoxia/Reoxygenation-Induced Tolerance With Respect to Polymorphonuclear Leukocyte Adhesion to Cultured Endothelial Cells: A Nuclear Factor-xB-Mediated Phenomenon, 103
- Evidence for a Vasopressin System in the Rat Heart, 365
- Gene Transfer of Endothelial Nitric Oxide Synthase to the Lung of the Mouse In Vivo: Effect on Agonist-Induced and Flow-Mediated Vascular Responses, 1422
- Isoform-Selective Activation of Protein Kinase C by Nitric Oxide in the Heart of Conscious Rabbits: A Signaling Mechanism for Both Nitric Oxide-Induced and Ischemia-Induced Preconditioning, 587
- Mechanism of Nitric Oxide-Induced Vasodilatation: Refilling of Intracellular Stores by Sarcoplasmic Reticulum Ca²⁺ ATPase and Inhibition of Store-Operated Ca²⁺ Influx, 210
- Modulation of Cytokine-Induced Cardiac Myocyte Apoptosis by Nitric Oxide, Bak, and Bcl-x, 21
- Nitric Oxide and C-Type Atrial Natriuretic Peptide Stimulate Primary
 Aortic Smooth Muscle Cell Migration via a cGMP-Dependent
 Mechanism: Relationship to Microfilament Dissociation and
 Altered Cell Morphology, 655
- Nitric Oxide as a Bifunctional Regulator of Apoptosis, 253
- Nitric Oxide Inhibits Capacitative Cation Influx in Human Platelets by Promoting Sarcoplasmic/Endoplasmic Reticulum Ca²⁺-ATPase– Dependent Refilling of Ca²⁺ Stores, 201
- Potential Role of a Membrane-Bound NADH Oxidoreductase in Nitric Oxide Release and Arterial Relaxation to Nitroprusside, 220
- Nitric oxide signaling
 - Activation of Distinct cAMP-Dependent and cGMP-Dependent Pathways by Nitric Oxide in Cardiac Myocytes, 1020
- Nitric oxide synthase
 - Anoxia/Reoxygenation-Induced Tolerance With Respect to Polymorphonuclear Leukocyte Adhesion to Cultured Endothelial Cells: A Nuclear Factor-xB-Mediated Phenomenon, 103
- Deficient Platelet-Derived Nitric Oxide and Enhanced Hemostasis in Mice Lacking the NOSIII Gene, 1416
- Regulation of Sympathetic Nerve Activity in Heart Failure: A Role for Nitric Oxide and Angiotensin II, 417
- Nitroprusside
- Potential Role of a Membrane-Bound NADH Oxidoreductase in Nitric Oxide Release and Arterial Relaxation to Nitroprusside, 220
- Nuclear factor-kB
- Activation of Receptor for Advanced Glycation End Products: A Mechanism for Chronic Vascular Dysfunction in Diabetic Vasculopathy and Atherosclerosis, 489
- Angiotensin II Induces Interleukin-6 Transcription in Vascular Smooth Muscle Cells Through Pleiotropic Activation of Nuclear Factor- kB Transcription Factors, 695
- Liposomal Delivery of Purified Inhibitory-κBα Inhibits Tumor Necrosis Factor-α-Induced Human Vascular Smooth Muscle Proliferation 867
- Nuclear Factor-κB Regulates Induction of Apoptosis and Inhibitor of Apoptosis Protein-1 Expression in Vascular Smooth Muscle Cells, 668
- **Nucleus**
 - Structural Plasticity of the Cardiac Nuclear Pore Complex in Response to Regulators of Nuclear Import, 1292
 - (
- Occlusive vascular disease
 - Homocysteine Enhances Neutrophil-Endothelial Interactions in Both Cultured Human Cells and Rats In Vivo, 409
- Osteopontin
 - Calcification of Vascular Smooth Muscle Cell Cultures: Inhibition by Osteopontin, 166
 - Osteopontin: Between a Rock and a Hard Plaque, 250
- Oxidation
- Very Low-Density Lipoprotein Activates Nuclear Factor-κB in Endothelial Cells, 1085
- Oxidation-reduction
 - Molecular Mechanisms of Neutrophil-Endothelial Cell Adhesion Induced by Redox Imbalance, 516

- Oxidative stress
- Modulation of Cytokine-Induced Cardiac Myocyte Apoptosis by Nitric Oxide, Bak, and Bcl-x, 21
- Oxidized LDI
- Activation of p38 Mitogen-Activated Protein Kinase by Oxidized LDL in Vascular Smooth Muscle Cells: Mediation via Pertussis Toxin-Sensitive G Proteins and Association With Oxidized LDL-Induced Cytotoxicity, 831
- LOX-1, a Possible Clue to the Missing Link Between Hypertension and Atherogenesis, [1]3
- Upregulation of Endothelial Receptor for Oxidized Low-Density Lipoprotein (LOX-1) in Cultured Human Coronary Artery Endothelial Cells by Angiotensin II Type 1 Receptor Activation, 1043
- Oxygen consumption

 Regulation of Myocardial Blood Flow by Oxygen Consumption Is

 Maintained in the Failing Heart During Exercise, 401
 - p
- P-selectin
 - Effect of Recombinant Soluble P-Selectin Glycoprotein Ligand-1 on Leukocyte-Endothelium Interaction In Vivo: Role in Rat Traumatic Shock, 93
- Endothelial Injuries of Coronary Arteries Distal to Thrombotic Sites:
 Role of Adhesive Interaction Between Endothelial P-Selectin and
 Leukocyte Sialyl Lewis^X, 525
- P38 mitogen-activated protein kinase
- Activation of p38 Mitogen-Activated Protein Kinase by Oxidized LDL in Vascular Smooth Muscle Cells: Mediation via Pertussis Toxin-Sensitive G Proteins and Association With Oxidized LDL-Induced Cytotoxicity, 831
- P5
 - Overexpression of Insulin-Like Growth Factor-1 Attenuates the Myocyte Renin-Angiotensin System in Transgenic Mice, 752
- Pacemake
 - A Novel Mechanism of Anode-Break Stimulation Predicted by Bidomain Modeling, 153
- Passive force
 - Mechanically Driven Contour-Length Adjustment in Rat Cardiac Titin's Unique N2B Sequence: Titin Is an Adjustable Spring, 1339
- Patch clamp
- Multiple Connexins Form Gap Junction Channels in Rat Basilar Artery Smooth Muscle Cells, 1277
- PC12 cell
 - Proadrenomedullin N-Terminal 20 Peptide Hyperpolarizes the Membrane by Activating an Inwardly Rectifying K* Current in Differentiated PC12 Cells, 445
- DDOSOS
- Mitogen-Activated Protein/Extracellular Signal-Regulated Kinase Inhibition Attenuates Angiotensin II-Mediated Signaling and Contraction in Spontaneously Hypertensive Rat Vascular Smooth Muscle Cells, 505
- Perivascular
 - Endothelial Implants Inhibit Intimal Hyperplasia After Porcine Angioplasty, 384
- Permeability
- Modulation of Iron Uptake in Heart by L-Type Ca²⁺ Channel Modifiers: Possible Implications in Iron Overload, 1302
- Peroxynitrite
 - Chemiluminescent Detection of Oxidants in Vascular Tissue: Lucigenin But Not Coelenterazine Enhances Superoxide Formation, 1203
 - Nitric Oxide as a Bifunctional Regulator of Apoptosis, 253
- Nuclear Factor-κB Plays an Essential Role in the Late Phase of Ischemic Preconditioning in Conscious Rabbits, 1095
- Persistent truncus arteriosus
 - HIRA, a DiGeorge Syndrome Candidate Gene, Is Required for Cardiac Outflow Tract Septation, 127
- pH
- Mitogen-Activated Protein/Extracellular Signal-Regulated Kinase Inhibition Attenuates Angiotensin II-Mediated Signaling and Contraction in Spontaneously Hypertensive Rat Vascular Smooth Muscle Cells, 505

PH, regulation

Hetero-Domain Interactions as a Mechanism for the Regulation of Connexin Channels, 1144

Phosphatase

cdc25A Is Necessary but Not Sufficient for Optimal c-myc-Induced Apoptosis and Cell Proliferation of Vascular Smooth Muscle Cells, 820

Establishment of β -Adrenergic Modulation of L-Type Ca²⁺ Current in the Early Stages of Cardiomyocyte Development, 136

Phosphatidylinositol 3-kinase

Molecular Mechanisms of Endothelin-1-Induced Cell-Cycle Progression: Involvement of Extracellular Signal-Regulated Kinase, Protein Kinase C, and Phosphatidylinositol 3-Kinase at Distinct Points, 611

Phosphodiesterase

Establishment of β -Adrenergic Modulation of L-Type Ca²⁺ Current in the Early Stages of Cardiomyocyte Development, 136

Nitric Oxide/cAMP Interactions in the Control of Rat Renal Vascular Resistance, 186

Phospholamban

Phospholamban Is Present in Endothelial Cells and Modulates Endothelium-Dependent Relaxation: Evidence From Phospholamban Gene-Ablated Mice, 360

Phospholipase A

Nitric Oxide-Independent Relaxations to Acetylcholine and A23187 Involve Different Routes of Heterocellular Communication: Role of Gap Junctions and Phospholipase A₂, 53

PKC€ isoform

Isoform-Selective Activation of Protein Kinase C by Nitric Oxide in the Heart of Conscious Rabbits: A Signaling Mechanism for Both Nitric Oxide-Induced and Ischemia-Induced Preconditioning, 587

Platelet-activating factor

Thrombopoietin Stimulates Endothelial Cell Motility and Neoangiogenesis by a Platelet-Activating Factor-Dependent Mechanism, 785

Platelet-derived growth factor

Endothelial Cells Modulate the Proliferation of Mural Cell Precursors via Platelet-Derived Growth Factor-BB and Heterotypic Cell Contact, 298

Platelet-derived growth factor α-receptor

A High Level of CCAAT-Enhancer Binding Protein-δ Expression Is a Major Determinant for Markedly Elevated Differential Gene Expression of the Platelet-Derived Growth Factor-α Receptor in Vascular Smooth Muscle Cells of Genetically Hypertensive Rats, 64

Platelet-derived growth factor-A

GC Factor 2 Represses Platelet-Derived Growth Factor A-Chain Gene Transcription and Is Itself Induced by Arterial Injury, 1258

Platelets

Deficient Platelet-Derived Nitric Oxide and Enhanced Hemostasis in Mice Lacking the NOSIII Gene, 1416

Nitric Oxide Inhibits Capacitative Cation Influx in Human Platelets by Promoting Sarcoplasmic/Endoplasmic Reticulum Ca²⁺-ATPase– Dependent Refilling of Ca²⁺ Stores, 201

Poly(ADP-ribose) polymerase

Modulation of Cytokine-Induced Cardiac Myocyte Apoptosis by Nitric Oxide, Bak, and Bcl-x, 21

Polymorphonuclear neutrophil

Tumor Necrosis Factor- α Contributes to Ischemia- and Reperfusion-Induced Endothelial Activation in Isolated Hearts, 392

Postischemic myocardial dysfunction

Nuclear Factor-κB Plays an Essential Role in the Late Phase of Ischemic Preconditioning in Conscious Rabbits, 1095

Pressure overload

Evidence for a Vasopressin System in the Rat Heart, 365

Pressure-overload hypertrophy

Reduced Subendocardial Ryanodine Receptors and Consequent Effects on Cardiac Function in Conscious Dogs With Left Ventricular Hypertrophy, 999

Proliferation

Heparin Proteoglycans Released From Rat Serosal Mast Cells Inhibit Proliferation of Rat Aortic Smooth Muscle Cells in Culture, 74 Promoter activity

A High Level of CCAAT-Enhancer Binding Protein-δ Expression Is a Major Determinant for Markedly Elevated Differential Gene Expression of the Platelet-Derived Growth Factor-α Receptor in Vascular Smooth Muscle Cells of Genetically Hypertensive Rats, 64

Promoter region

A Concise Promoter Region of the Heart Fatty Acid-Binding Protein Gene Dictates Tissue-Appropriate Expression, 276

Prorenin

An Alternative Transcript of the Rat Renin Gene Can Result in a Truncated Prorenin That Is Transported Into Adrenal Mitochondria, 337

In Vivo Enzymatic Assay Reveals Catalytic Activity of the Human Renin Precursor in Tissues, 1067

Prostacyclin

Glucocorticoids Downregulate Cyclooxygenase-1 Gene Expression and Prostacyclin Synthesis in Fetal Pulmonary Artery Endothelium, 193

Protein C

Local Overexpression of Thrombomodulin for In Vivo Prevention of Arterial Thrombosis in a Rabbit Model, 84

Protein degradation

Troponin I Degradation and Covalent Complex Formation Accompanies Myocardial Ischemia/Reperfusion Injury, 9

Protein kinase C

Activated Protein Kinase C Isoforms Target to Cardiomyocyte Caveolae: Stimulation of Local Protein Phosphorylation, 980

Caveolar Microdomains of the Sarcolemma: Compartmentation of Signaling Molecules Comes of Age, 1110

Mechanical Stimulation Regulates Voltage-Gated Potassium Currents in Cardiac Microvascular Endothelial Cells, 451

Molecular Mechanisms of Endothelin-1-Induced Cell-Cycle Progression: Involvement of Extracellular Signal-Regulated Kinase, Protein Kinase C, and Phosphatidylinositol 3-Kinase at Distinct Points, 611

Role of Protein Kinase C in Mitochondrial K_{ATP} Channel-Mediated Protection Against Ca²⁺ Overload Injury in Rat Myocardium, 1156

Protein kinase G

Modulation of Cytokine-Induced Cardiac Myocyte Apoptosis by Nitric Oxide, Bak, and Bcl-x, 21

Protein kinases

Cardioprotection of Preconditioning by Metabolic Inhibition in the Rat Ventricular Myocyte: Involvement of κ-Opioid Receptor, 1388

Protein targeting

An Alternative Transcript of the Rat Renin Gene Can Result in a Truncated Prorenin That Is Transported Into Adrenal Mitochondria, 337

Proteinase

Regression of Hypertrophied Rat Pulmonary Arteries in Organ Culture Is Associated With Suppression of Proteolytic Activity, Inhibition of Tenascin-C, and Smooth Muscle Cell Apoptosis, 1223

roton

Acid-Evoked Currents in Cardiac Sensory Neurons: A Possible Mediator of Myocardial Ischemic Sensation, 921

Pulmonary arterial smooth muscle cell

Induction of Serotonin Transporter by Hypoxia in Pulmonary Vascular Smooth Muscle Cells: Relationship With the Mitogenic Action of Serotonin, 329

Pulmonary circulation

Glucocorticoids Downregulate Cyclooxygenase-1 Gene Expression and Prostacyclin Synthesis in Fetal Pulmonary Artery Endothelium, 193

Pulmonary hypertension

Induction of Serotonin Transporter by Hypoxia in Pulmonary Vascular Smooth Muscle Cells: Relationship With the Mitogenic Action of Serotonin, 329

Pulmonary vascular bed

Gene Transfer of Endothelial Nitric Oxide Synthase to the Lung of the Mouse In Vivo: Effect on Agonist-Induced and Flow-Mediated Vascular Responses, 1422 Pulmonary vascular regression

Regression of Hypertrophied Rat Pulmonary Arteries in Organ Culture Is Associated With Suppression of Proteolytic Activity, Inhibition of Tenascin-C, and Smooth Muscle Cell Apoptosis, 1223

Quantitative modeling

A Novel Mechanism of Anode-Break Stimulation Predicted by Bidomain Modeling, 153

Opioid-Induced Second Window of Cardioprotection: Potential Role of Mitochondrial KATP Channels, 846

Rabbit

Natural Androgens Inhibit Male Atherosclerosis: A Study in Castrated, Cholesterol-Fed Rabbits, 813

Rapidly activating delayed K+ channel

Mechanism of Block and Identification of the Verapamil Binding Domain to HERG Potassium Channels, 989

Examination of the Transverse Tubular System in Living Cardiac Rat Myocytes by 2-Photon Microscopy and Digital Image-Processing Techniques, 266

Rat cardiac trabeculae

Waves During Triggered Propagated Contractions in Intact Trabeculae: Determinants of the Velocity of Propagation, 1459

Rat, inbred strain

Cosegregation Analysis in Genetic Crosses Suggests a Protective Role for Atrial Natriuretic Factor Against Ventricular Hypertrophy. 1453

Strain Differences in Neointimal Hyperplasia in the Rat, 1252

Rat, spontaneously hypertensive

Cellular Mechanisms of Altered Contractility in the Hypertrophied Heart: Big Hearts, Big Sparks, 424

Failure of Calcineurin Inhibitors to Prevent Pressure-Overload Left Ventricular Hypertrophy in Rats, 722

Reactive oxygen species

Modulation of Ras/Raf/Extracellular Signal-Regulated Kinase Pathway by Reactive Oxygen Species Is Involved in Cyclic Strain-Induced Early Growth Response-1 Gene Expression in Endothelial Cells, 804

Tissue-Destructive Macrophages in Giant Cell Arteritis, 1050

Cardioprotection of Preconditioning by Metabolic Inhibition in the Rat Ventricular Myocyte: Involvement of κ-Opioid Receptor, 1388

Direct Preconditioning of Cardiac Myocytes via Opioid Receptors and KATP Channels, 1396

Expression and Distribution of the Type 1 and Type 3 Inositol 1,4,5-Trisphosphate Receptor in Developing Vascular Smooth Muscle, 536

Stimulation of Different Subtypes of Angiotensin II Receptors, AT1 and AT2 Receptors, Regulates STAT Activation by Negative Crosstalk, 876

Upregulation of Endothelial Receptor for Oxidized Low-Density Lipoprotein (LOX-1) in Cultured Human Coronary Artery Endothelial Cells by Angiotensin II Type 1 Receptor Activation, 1043

Receptor, type B

Structure of the Type B Human Natriuretic Peptide Receptor Gene and Association of a Novel Microsatellite Polymorphism With Essential Hypertension, 605

Receptors, opioid

Opioid-Induced Second Window of Cardioprotection: Potential Role of Mitochondrial KATP Channels, 846

Potential Role of a Membrane-Bound NADH Oxidoreductase in Nitric Oxide Release and Arterial Relaxation to Nitroprusside, 220

Regenerated endothelium

Alteration of Endothelium-Dependent Hyperpolarizations in Porcine Coronary Arteries With Regenerated Endothelium, 371

Plasticity in the Dynamics of Myocardial Contraction: Ca2+, Crossbridge Kinetics, or Molecular Cooperation, 862

Regulation of contraction

Cardiac Myosin Binding Protein C, 1117

Remodeling

Vitaxin, a Humanized Monoclonal Antibody to the Vitronectin Receptor (α_νβ₃), Reduces Neointimal Hyperplasia and Total Vessel Area After Balloon Injury in Hypercholesterolemic Rabbits, 1268

Remodeling, atrial

Molecular Mechanisms Underlying Ionic Remodeling in a Dog Model of Atrial Fibrillation, 776

Renal blood flow

Nitric Oxide/cAMP Interactions in the Control of Rat Renal Vascular Resistance, 186

Renal nerve activity

Regulation of Sympathetic Nerve Activity in Heart Failure: A Role for Nitric Oxide and Angiotensin II, 417

Renin

Direct Demonstration of Exocytosis and Endocytosis in Single Mouse Juxtaglomerular Cells, 929

Distinct Renin Isoforms Generated by Tissue-Specific Transcription Initiation and Alternative Splicing, 240

In Vivo Enzymatic Assay Reveals Catalytic Activity of the Human Renin Precursor in Tissues, 1067

Transcription Factor Decoy to Study the Molecular Mechanism of Negative Regulation of Renin Gene Expression in the Liver In Vivo, 1059

Renin-angiotensin system

An Alternative Transcript of the Rat Renin Gene Can Result in a Truncated Prorenin That Is Transported Into Adrenal Mitochon-

Angiotensin II Induces Interleukin-6 Transcription in Vascular Smooth Muscle Cells Through Pleiotropic Activation of Nuclear Factor-kB Transcription Factors, 695

Distinct Renin Isoforms Generated by Tissue-Specific Transcription Initiation and Alternative Splicing, 240

Tumor Necrosis Factor-α Contributes to Ischemia- and Reperfusion-Induced Endothelial Activation in Isolated Hearts, 392

Repolarization

Manipulation of Cellular Excitability by Cell Fusion: Effects of Rapid Introduction of Transient Outward K+ Current on the Guinea Pig Action Potential, 964

Mitogen-Activated Protein/Extracellular Signal-Regulated Kinase Inhibition Attenuates Angiotensin II-Mediated Signaling and Contraction in Spontaneously Hypertensive Rat Vascular Smooth Muscle Cells, 505

Anti-Monocyte Chemoattractant Protein-1/Monocyte Chemotactic and Activating Factor Antibody Inhibits Neointimal Hyperplasia in Injured Rat Carotid Arteries, 306

Balloon-Artery Interactions During Stent Placement: A Finite Element Analysis Approach to Pressure, Compliance, and Stent Design as Contributors to Vascular Injury, 378

Determinants of Vascular Smooth Muscle Cell Apoptosis After Balloon Angioplasty Injury: Influence of Redox State and Cell Phenotype, 113

Endothelial Implants Inhibit Intimal Hyperplasia After Porcine Angioplasty, 384

EVEC, a Novel Epidermal Growth Factor-Like Repeat-Containing Protein Upregulated in Embryonic and Diseased Adult Vascula-

Nuclear Factor-kB Regulates Induction of Apoptosis and Inhibitor of Apoptosis Protein-1 Expression in Vascular Smooth Muscle

Reversal of GATA-6 Downregulation Promotes Smooth Muscle Differentiation and Inhibits Intimal Hyperplasia in Balloon-Injured Rat Carotid Artery, 647

Strain Differences in Neointimal Hyperplasia in the Rat, 1252

Tranilast Inhibits Vascular Smooth Muscle Cell Growth and Intimal Hyperplasia by Induction of p21waf1/cip1/sdi1 and p53, 543

Restitution

Electrical Restitution and Spatiotemporal Organization During Ventricular Fibrillation, 955

Restitution curve

Spatiotemporal Heterogeneity in the Induction of Ventricular Fibrillation by Rapid Pacing: Importance of Cardiac Restitution Proper-

Rho

Rho and Rho Kinase Mediate Thrombin-Stimulated Vascular Smooth Muscle Cell DNA Synthesis and Migration, 1186

Rho Family Small G Proteins Play Critical Roles in Mechanical Stress-Induced Hypertrophic Responses in Cardiac Myocytes, 458

Rolling

Direct Demonstration of P-Selectin- and VCAM-1-Dependent Mononuclear Cell Rolling in Early Atherosclerotic Lesions of Apolipoprotein E-Deficient Mice, 1237

S

S-nitroso-N-acetylpenicillamine

Isoform-Selective Activation of Protein Kinase C by Nitric Oxide in the Heart of Conscious Rabbits: A Signaling Mechanism for Both Nitric Oxide-Induced and Ischemia-Induced Preconditioning, 587

Sarcolemma

Sarcolemmal Versus Mitochondrial ATP-Sensitive K+ Channels and Myocardial Preconditioning, 973

Sarcomere

Correlation Between Myofilament Response to Ca2+ and Altered Dynamics of Contraction and Relaxation in Transgenic Cardiac Cells That Express β-Tropomyosin, 745

Sarcoplasmic reticulum

Calmodulin Kinase Inhibition Prevents Development of the Arrhythmogenic Transient Inward Current, 906

Mechanisms of Altered Excitation-Contraction Coupling in Canine Tachycardia-Induced Heart Failure, I: Experimental Studies, 562

Reduced Subendocardial Ryanodine Receptors and Consequent Effects on Cardiac Function in Conscious Dogs With Left Ventricular Hypertrophy, 999

The Sarcoplasmic Reticulum and the Na+/Ca2+ Exchanger Both Contribute to the Ca2+ Transient of Failing Human Ventricular Myocytes, 435

Sarcoplasmic/endoplasmic reticulum Ca2+ ATPase

Nitric Oxide Inhibits Capacitative Cation Influx in Human Platelets by Promoting Sarcoplasmic/Endoplasmic Reticulum Ca2+-ATPase-Dependent Refilling of Ca2+ Stores, 201

Selectin

Deficient Platelet-Derived Nitric Oxide and Enhanced Hemostasis in Mice Lacking the NOSIII Gene, 1416

Direct Demonstration of P-Selectin- and VCAM-1-Dependent Mononuclear Cell Rolling in Early Atherosclerotic Lesions of Apolipoprotein E-Deficient Mice, 1237

Septation

Molecular Genetics of Congenital Heart Disease: A Problem of Faulty Septation, 247

SERCA

Phospholamban Is Present in Endothelial Cells and Modulates Endothelium-Dependent Relaxation: Evidence From Phospholamban Gene-Ablated Mice, 360

Alteration of Endothelium-Dependent Hyperpolarizations in Porcine Coronary Arteries With Regenerated Endothelium, 371 Sialyl Lewis^x

Endothelial Injuries of Coronary Arteries Distal to Thrombotic Sites: Role of Adhesive Interaction Between Endothelial P-Selectin and Leukocyte Sialyl Lewis^x, 525

Signal transduction

α-Adrenergic Stimulation Mediates Glucose Uptake Through Phosphatidylinositol 3-Kinase in Rat Heart, 467

Calcineurin Inhibition as Therapy for Cardiac Hypertrophy and Heart Failure: Requiescat in Pace? 741

Neuregulin Signaling in the Heart: Dynamic Targeting of erbB4 to Caveolar Microdomains in Cardiac Myocytes, 1380

Thrombopoietin Stimulates Endothelial Cell Motility and Neoangiogenesis by a Platelet-Activating Factor-Dependent Mechanism, 785

Tranilast Inhibits Vascular Smooth Muscle Cell Growth and Intimal Hyperplasia by Induction of p21waf1/cip1/sdi1 and p53, 543

Vascular Endothelial Growth Factor Induces Activation and Subcellular Translocation of Focal Adhesion Kinase (p125FAK) in Cultured Rat Cardiac Myocytes, 1194

Silencer

Purification and Preliminary Characterization of a Cardiac Kv1.5 Repressor Element Binding Factor, 937

Spina vestibuli

Mechanisms of Deficient Cardiac Septation in the Mouse With Trisomy 16, 897

STAT

Stimulation of Different Subtypes of Angiotensin II Receptors, AT1 and AT2 Receptors, Regulates STAT Activation by Negative

Thrombopoietin Stimulates Endothelial Cell Motility and Neoangiogenesis by a Platelet-Activating Factor-Dependent Mechanism. 785

Stenosis

Vascular Injury Causes Neointimal Formation in Angiotensin II Type 1a Receptor Knockout Mice, 179

Balloon-Artery Interactions During Stent Placement: A Finite Element Analysis Approach to Pressure, Compliance, and Stent Design as Contributors to Vascular Injury, 378

Strain-specific gene transcription

A High Level of CCAAT-Enhancer Binding Protein-δ Expression Is a Major Determinant for Markedly Elevated Differential Gene Expression of the Platelet-Derived Growth Factor-α Receptor in Vascular Smooth Muscle Cells of Genetically Hypertensive Rats 64

Stress-activated protein kinase

Determinants of Vascular Smooth Muscle Cell Apoptosis After Balloon Angioplasty Injury: Influence of Redox State and Cell Phenotype, 113

Stress, cellular

Structural Plasticity of the Cardiac Nuclear Pore Complex in Response to Regulators of Nuclear Import, 1292

Stretch

Mechanical Stimulation Regulates Voltage-Gated Potassium Currents in Cardiac Microvascular Endothelial Ceils, 451

Stunning

Sodium Regulation During Ischemia Versus Reperfusion and Its Role in Injury, 1469

Subsarcolemmal Ca2+

Local Ca2+ Entry Through L-Type Ca2+ Channels Activates Ca2+ Dependent K+ Channels in Rabbit Coronary Myocytes, 1032

Superoxide

Chemiluminescent Detection of Oxidants in Vascular Tissue: Lucigenin But Not Coelenterazine Enhances Superoxide Formation, 1203

Superoxide anion

Daunorubicin-Induced Apoptosis in Rat Cardiac Myocytes Is Inhibited by Dexrazoxane, 257

Sympathoexcitation

Regulation of Sympathetic Nerve Activity in Heart Failure: A Role for Nitric Oxide and Angiotensin II, 417

Systole

Reduced Subendocardial Ryanodine Receptors and Consequent Effects on Cardiac Function in Conscious Dogs With Left Ventricular Hypertrophy, 999

T

T-system

Examination of the Transverse Tubular System in Living Cardiac Rat Myocytes by 2-Photon Microscopy and Digital Image-Processing Techniques, 266

Tenascin-C

Regression of Hypertrophied Rat Pulmonary Arteries in Organ Culture Is Associated With Suppression of Proteolytic Activity, Inhibition of Tenascin-C, and Smooth Muscle Cell Apoptosis, 1223

Testosterone

Natural Androgens Inhibit Male Atherosclerosis: A Study in Castrated, Cholesterol-Fed Rabbits, 813

Tetrahydrobiopterin

Anoxia/Reoxygenation-Induced Tolerance With Respect to Polymorphonuclear Leukocyte Adhesion to Cultured Endothelial Cells: A Nuclear Factor-kB-Mediated Phenomenon, 103

Thin filament

Correlation Between Myofilament Response to Ca2+ and Altered Dynamics of Contraction and Relaxation in Transgenic Cardiac Cells That Express β-Tropomyosin, 745

Rho and Rho Kinase Mediate Thrombin-Stimulated Vascular Smooth Muscle Cell DNA Synthesis and Migration, 1186

Thrombosis

Adenovirus-Mediated Local Expression of Human Tissue Factor Pathway Inhibitor Eliminates Shear Stress-Induced Recurrent Thrombosis in the Injured Carotid Artery of the Rabbit, 1446

Endothelial Implants Inhibit Intimal Hyperplasia After Porcine Angio-

Endothelial Injuries of Coronary Arteries Distal to Thrombotic Sites: Role of Adhesive Interaction Between Endothelial P-Selectin and Leukocyte Sialyl Lewis^X, 525

Role of the Ets Transcription Factors in the Regulation of the Vascular-Specific Tie2 Gene, 1177

Intracellular Sodium Accumulation During Ischemia as the Substrate for Reperfusion Injury, 1401

Tissue engineering

Endothelial Implants Inhibit Intimal Hyperplasia After Porcine Angioplasty, 384

Tissue expression

Identification and Cloning of a Secreted Protein Related to the Cysteine-Rich Domain of Frizzled: Evidence for a Role in Endothelial Cell Growth Control, 1433

Tissue factor pathway inhibitor

Thinking Globally, Acting Locally: The Promise of Cardiovascular Gene Therapy, 1471

Tissue inhibitor

TIMP-4 Is Regulated by Vascular Injury in Rats, 498

Transcription

GC Factor 2 Represses Platelet-Derived Growth Factor A-Chain Gene Transcription and Is Itself Induced by Arterial Injury, 1258

Purification and Preliminary Characterization of a Cardiac Kv1.5 Repressor Element Binding Factor, 937

Rapid Induction and Translocation of Egr-1 in Response to Mechanical Strain in Vascular Smooth Muscle Cells, 678

Role of the Ets Transcription Factors in the Regulation of the Vascular-Specific Tie2 Gene, 1177

Signaling in Myocardial Hypertrophy: Life After Calcineurin? 633 Transcription factor

Very Low-Density Lipoprotein Activates Nuclear Factor-kB in Endothelial Cells, 1085

Transcription factor decoy

Transcription Factor Decoy to Study the Molecular Mechanism of Negative Regulation of Renin Gene Expression in the Liver In Vivo. 1059

Transfection

Regulation of Smooth Muscle α-Actin Expression In Vivo Is Dependent on CArG Elements Within the 5' and First Intron Promoter

A Concise Promoter Region of the Heart Fatty Acid-Binding Protein Gene Dictates Tissue-Appropriate Expression, 276

Transglutaminase

Troponin I Degradation and Covalent Complex Formation Accompanies Myocardial Ischemia/Reperfusion Injury, 9

Transient inward current

Calmodulin Kinase Inhibition Prevents Development of the Arrhythmogenic Transient Inward Current, 906

Transient outward current

Manipulation of Cellular Excitability by Cell Fusion: Effects of Rapid Introduction of Transient Outward K+ Current on the Guinea Pig Action Potential, 964

Molecular Identity of Ito: Kv1.4 Redux, 620

Translocation

Isoform-Selective Activation of Protein Kinase C by Nitric Oxide in the Heart of Conscious Rabbits: A Signaling Mechanism for Both Nitric Oxide-Induced and Ischemia-Induced Preconditioning, 587

Transport

Structural Plasticity of the Cardiac Nuclear Pore Complex in Response to Regulators of Nuclear Import, 1292

Triggered propagated contraction

Ca2+ Waves During Triggered Propagated Contractions in Intact Trabeculae: Determinants of the Velocity of Propagation, 1459

Trisomy

Mechanisms of Deficient Cardiac Septation in the Mouse With Trisomy 16, 897

Tropomyosin

Correlation Between Myofilament Response to Ca2+ and Altered Dynamics of Contraction and Relaxation in Transgenic Cardiac Cells That Express β-Tropomyosin, 745

Troponin I Degradation and Covalent Complex Formation Accompanies Myocardial Ischemia/Reperfusion Injury, 9

Troponin I, Stunning, Hypertrophy, and Failure of the Heart, 122

Tumor necrosis factor

Liposomal Delivery of Purified Inhibitory-κBα Inhibits Tumor Necrosis Factor-α-Induced Human Vascular Smooth Muscle Proliferation, 867

Tyrosine kinase

The Angiotensin II-Dependent Association of Jak2 and c-Src Requires the N-Terminus of Jak2 and the SH2 Domain of c-Src, 1332

U

Ultrastructure

Calcification of Vascular Smooth Muscle Cell Cultures: Inhibition by Osteopontin, 166

Vascular biology

Eight Years Behind the Masthead, 1361

Vascular calcification

Calcification of Vascular Smooth Muscle Cell Cultures: Inhibition by Osteopontin, 166

Vascular disease

Calcification of Vascular Smooth Muscle Cell Cultures: Inhibition by Osteopontin, 166

Osteopontin: Between a Rock and a Hard Plaque, 250

Vascular injury

Balloon-Artery Interactions During Stent Placement: A Finite Element Analysis Approach to Pressure, Compliance, and Stent Design as Contributors to Vascular Injury, 378

TIMP-4 Is Regulated by Vascular Injury in Rats, 498 Mechanism: Relationship to Microfilament Dissociation and Altered Cell Morphology, 655

Rho and Rho Kinase Mediate Thrombin-Stimulated Vascular Smooth Muscle Cell DNA Synthesis and Migration, 1186

Vascular smooth muscle cell

Analysis of the Presence and Physiological Relevance of Subconducting States of Connexin43-Derived Gap Junction Channels in Cultured Human Corporal Vascular Smooth Muscle Cells, 797

The Angiotensin II-Dependent Association of Jak2 and c-Src Requires the N-Terminus of Jak2 and the SH2 Domain of c-Src, 1332

cdc25A Is Necessary but Not Sufficient for Optimal c-myc-Induced Apoptosis and Cell Proliferation of Vascular Smooth Muscle

EVEC, a Novel Epidermal Growth Factor-Like Repeat-Containing Protein Upregulated in Embryonic and Diseased Adult Vasculature, 1166

A High Level of CCAAT-Enhancer Binding Protein-δ Expression Is a Major Determinant for Markedly Elevated Differential Gene Expression of the Platelet-Derived Growth Factor-α Receptor in Vascular Smooth Muscle Cells of Genetically Hypertensive Rats, 64

Stimulation of Different Subtypes of Angiotensin II Receptors, AT_1 and AT_2 Receptors, Regulates STAT Activation by Negative Crosstalk, 876

Vasculitis

Tissue-Destructive Macrophages in Giant Cell Arteritis, 1050

Vasculogenesis

- Endothelial Cells Modulate the Proliferation of Mural Cell Precursors via Platelet-Derived Growth Factor-BB and Heterotypic Cell Contact, 298
- Role of the Ets Transcription Factors in the Regulation of the Vascular-Specific Tie2 Gene, 1177

Vasoconstriction

Evidence for a Vasopressin System in the Rat Heart, 365

Vacarelavation

Phospholamban Is Present in Endothelial Cells and Modulates Endothelium-Dependent Relaxation: Evidence From Phospholamban Gene-Ablated Mice, 360

Ventricular fibrillation

Electrical Restitution and Spatiotemporal Organization During Ventricular Fibrillation, 955

Ventricular remodeling

Insulin-Like Growth Factor-1 Attenuates the Detrimental Impact of Nonocclusive Coronary Artery Constriction on the Heart, 1007

Viability

Physiological Basis for Potassium (39K) Magnetic Resonance Imaging of the Heart, 913

Vitaxin

Vitaxin, a Humanized Monoclonal Antibody to the Vitronectin Receptor (α, β_3) , Reduces Neointimal Hyperplasia and Total Vessel Area After Balloon Injury in Hypercholesterolemic Rabbits, 1268

VLDL

Very Low-Density Lipoprotein Activates Nuclear Factor-κB in Endothelial Cells, 1085

Voltage-gated K+ channel

Mechanical Stimulation Regulates Voltage-Gated Potassium Currents in Cardiac Microvascular Endothelial Cells, 451

W

Wavebreak

Spatiotemporal Heterogeneity in the Induction of Ventricular Fibrillation by Rapid Pacing: Importance of Cardiac Restitution Properties, 1318

Wavefront isolation

Incidence, Evolution, and Spatial Distribution of Functional Reentry During Ventricular Fibrillation in Pigs, 945

Wavetip

Incidence, Evolution, and Spatial Distribution of Functional Reentry During Ventricular Fibrillation in Pigs, 945

Whole-cell patch clamp

Acid-Evoked Currents in Cardiac Sensory Neurons: A Possible Mediator of Myocardial Ischemic Sensation, 921

Wortmannin

α-Adrenergic Stimulation Mediates Glucose Uptake Through Phosphatidylinositol 3-Kinase in Rat Heart, 467

X

Xenopus oocyte

- Angiotensin II Type 1 Receptor-Mediated Inhibition of K+ Channel Subunit Kv2.2 in Brain Stem and Hypothalamic Neurons, 352
- Hetero-Domain Interactions as a Mechanism for the Regulation of Connexin Channels, 1144

